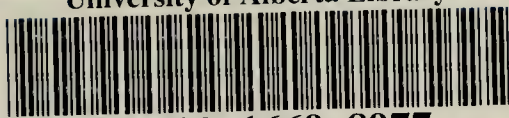


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THE *Blue Jay*

Vol. XXI, No. 2

SASKATOON, SASK.

June, 1963



Spider's Web

Photo by J. O. Hogg

Published quarterly by
THE SASKATCHEWAN NATURAL HISTORY SOCIETY
REGINA, SASK.

BLUE JAY CHATTER

Individuals and societies interested in preserving wildlife so that wild plants and animals will always be here for all to enjoy often have reason to feel deeply discouraged. We learn of song birds being sold in Canada at \$1.50 a dozen to grace an epicure's table; we are warned by biologist Dr. V. E. F. Solman of the Canadian Wildlife Service that the day may come when we hesitate to eat wild game because of the danger of being poisoned by pesticides; we learn of the proposal to add to the hunter's list of game birds the magnificent sandhill crane whose rolling call in spring and fall migration flights brings us something of the spirit of the wild.

Why must man be forever bent on indiscriminate killing and destruction? Why can we not accept the wise philosophy of "live and let live"? Many areas must be developed for intensive use by human beings, but why is there no effort made to save whatever we can wherever we can, to set aside for wildlife many and extensive areas which are in fact more suitable for this than for any other purpose? I am alarmed because in all our huge prairie grassland, where it sometimes takes far more than 40 acres to feed one cow, we cannot find one section to set aside as a grassland preserve, as a wildlife refuge, as a place where plants and animals may go unmolested by the activities of man. We are apparently obsessed by the idea that land must be "used", even if the land is so poor that taxes must be waived to encourage its "use". I am alarmed because in all our vast northland wilderness no place can be found which we can agree to preserve as inviolate, completely free of the money-making activities of man. Though interested people may suggest such an area with wise forethought for coming generations, it seems impossible to protect it against the interest of a single individual who claims his private right to choose that undeveloped area to develop for his own money-making scheme.

In the **Blue Jay** we have continued to urge protection for wildlife. Our Society on many occasions has expressed official protests or made constructive suggestions re: threatened natural areas and native species. For example, when cranes were under fire for damaging farmers' crops we urged the creation of refuges to protect and contain the birds. Some thought has indeed been given to buying land on Last Mountain Lake, but there is talk now of allowing the birds to collect there so that they can be the more effectively dispersed! Finally, after all the efforts to gain further protection for cranes, there comes a proposal to put them on the hunter's list!

This turn of events is not without its bitter irony. If the sandhill becomes a game species, thousands of dollars can be legitimately spent by government agencies and sportsmen's organizations in estimating breeding potential and expected harvest. Like ducks (which insurance adjusters claim do far more damage in the grain fields) sandhill cranes will now merit serious concern for their welfare.

No wonder conservationists feel like throwing up their hands and accepting defeat! The Saskatchewan Natural History Society, however, does not seem prepared to leave the field of battle. The article in the **Toronto Star Weekly** protesting "the slaughter of the singing snowbirds" has been supported by our Society's request that the snow bunting be added to the list of species protected under the Migratory Birds Act. The newspaper announcement of "last days of freedom waning for sandhill cranes" was answered by a telegram to the wildlife conference in Ottawa protesting the proposal to add the sandhill to the hunting list. Now, in this issue of the **Blue Jay**, we publish an article from Yorkton proposing the preservation and development of the wetlands of the area, an example of the wise, multi-purpose use of resources which our Society encourages. The Society will give this proposal any support it can. Good luck, Yorkton, with this splendid project!

The Blue Jay

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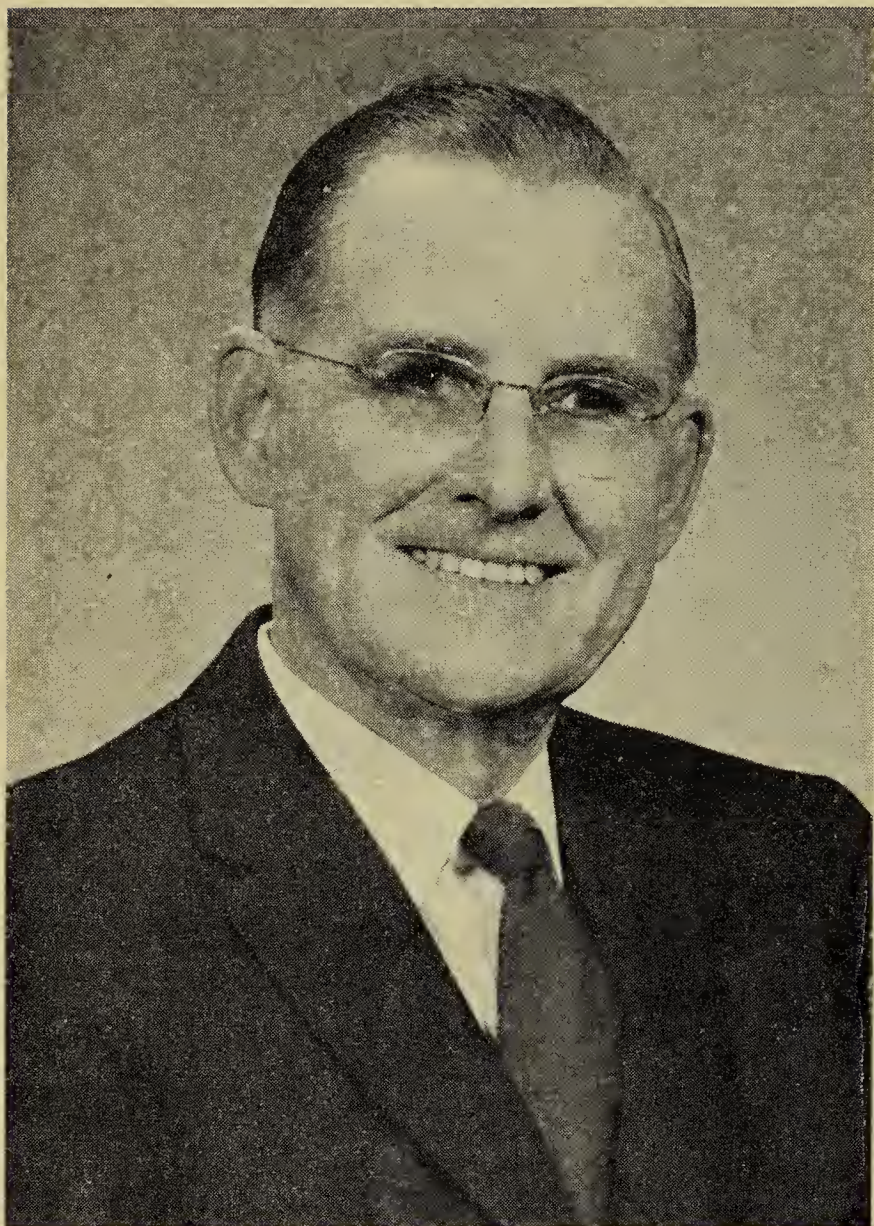
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Ezra Henry Moss, 1892-1963

by C. D. Bird, University of Alberta, Calgary



Canadian botanists have lost a friend and a truly great pioneer with the passing of Dr. E. H. Moss of Edmonton on February 7, 1963.

Born in 1892 at Thorndale, Ontario, Dr. Moss earned the Military Medal for service in the First World War. After obtaining his Ph.D. degree at the University of Toronto in 1925 he joined the staff of the Department of Botany at the University of Alberta, Edmonton, in 1929. In 1938 he was elevated to the rank of full Professor and became head of the Department. He retired in 1957 and at that time was further elevated to the rank of Professor Emeritus.

Prior to his arrival on the Alberta scene little botanical work had been done in the province. A few workers in the nineteenth century, namely Thomas Drummond, Eugene Bourgeau and John Macoun, had made

scattered collections, but their work was only exploratory in nature. The first organized attempt to describe the vegetation of the region was initiated by F. J. Lewis the first Head of the Department of Botany of the University of Alberta, who started a series of papers entitled "The Vegetation of Alberta." The second part of this project, on the swamp, moor and bog forest vegetation of central Alberta, was published in 1928 with E. S. Dowding and E. H. Moss as co-authors. The fourth part, with E. H. Moss as sole author, was devoted to the poplar association of central Alberta and appeared in 1932. Further installments, all by Dr. Moss, were on the prairie region of southwestern Alberta (1944), the vegetation of the Peace River region (1952), and that of northwestern Alberta (1953). All Alberta vegetational studies were summarized in 1955 in a

paper that appeared in the **Botanical Review**.

Along with his vegetational studies Dr. Moss collected, and was interested in, the vascular plants. Over 10,000 sheets of his material are represented in the University Herbarium in Edmonton. These specimens and those of other botanists who had worked in the area formed the basis of his "Flora of Alberta," the first flora ever to have been written for the province. This work has been very favorably received and the following review from **The American Midland Naturalist** is typical: "The publication of **Flora of Alberta** is a major event in North American floristic botany . . . a highly valuable, taxonomically up-to-date, and much needed work."

Although Dr. Moss's interests were mainly in vegetational description and

floristic taxonomy he has also published significant studies on the fungi, the bryophytes, and on plant anatomy. His personal collections of fungi and part of his collections of the bryophytes will be deposited at the University Herbarium in Edmonton. The remainder of the bryophytes will go to the University of Alberta, Calgary.

Not the least of his contributions was the encouragement and ready help that he gave to his colleagues, amateur and professional alike. Among those that blossomed with this aid were such non-professionals as A. H. Brinkman, W. C. McCalla, G. H. Turner and George Pegg, all of whom have made important contributions.

Long to be remembered are the many stimulating talks and educational field trips I have had with him. The last excursion we made together was a two-day trip in July, 1962, into the Sunshine area and Snow Creek Pass of Banff National Park. He was still remarkably agile and was making extensive collections with the view in mind of revising and enlarging his flora.

Dr. Moss is survived by his wife Margaret, and by two married daughters, Eleanor and Marion.

A list of his publications, which is nearly complete, follows:

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- 1928 Lewis, F. J., E. S. Dowding and E. H. Moss. The vegetation of Alberta. II. The swamp, moor and bog forest vegetation of central Alberta. Jour. Ecol. 16: 19-70.
- 1932 The vegetation of Alberta. IV. The poplar association and related vegetation of central Alberta. J. Ecol. 20: 380-415.
1934. Rings of cork in the wood of herbaceous perennials. Nature 133: 689-690.
- 1936 The ecology of *Epilobium angustifolium* with particular reference to rings of periderm in the wood. Amer. J. Bot. 23: 114-120.
- 1938 Longevity of seed and establishment of seedlings in species of *Populus*. Bot. Gaz. 99: 529-542.
- 1940 Overwintered Giant Puff-Balls in Alberta. Mycologia 32: 271-273.
- 1940 Interxylary cork in *Artemisia* with a reference to its taxonomical significance. Amer. J. Bot. 27: 762-768.
- 1944 The prairie and associated vegetation of southwestern Alberta. Can. J. Res. C. 22: 11-31.

- 1944 *Lilaea scillioides* in southeastern Alberta. Rhodora 46: 205-206.
- 1946 E. H. Moss and W. C. McCalla. Alfred Henry Brinkman, 1837-1945. Can. Field-Nat. 60: 107-108.
- 1947 E. H. Moss and J. H. Campbell. The fescue grassland of Alberta. Can. J. Res. C. 25: 209-227.
- 1949 Natural pine hybrids in Alberta. Can. J. Res. C. 27: 218-229.
- 1952 Rusts on *Adoxa* in Alberta. Mycologia 43: 99-102.
- 1952 Grassland of the Peace River region, western Canada. Can. J. Bot. 30: 98-124.
- 1953 E. H. Moss and A. L. Gorham. Interxylary cork and fission of stems and roots. Phytomorphology 3: 285-294.
- 1953 Forest communities in northwestern Alberta. Can. J. Bot. 31: 212-252.
- 1953 Marsh and bog vegetation in northwestern Alberta. Can. J. Bot. 31: 448-470.
- 1955 The vegetation of Alberta. Bot. Rev. 21: 493-567.
- 1956 Francis John Lewis. Proc. and Trans of the Roy. Soc. Canada. Third Series 50: 103-104.
- 1956 Ragweed in southeastern Alberta. Can. J. Bot. 34: 763-767.
- 1959 Flora of Alberta. Univ. Toronto Press.
- 1961 Large-flowered Hemp Nettle, *Galeopsis speciosa*. Blue Jay 19: 33-34.
- 1961 E. H. Moss and G. H. Turner. Bryophytes from the Edmonton region, Alberta. Can. J. Bot. 39: 1177-1193.

Death Leads to New-born Life

by E. A. Dowson

in memory of his wife

As death strikes home at one we loved
We sink prostrate with grief,
And kindly words of dearest friends
Bring no heartfelt relief.

But as time eases death's sharp sting
Our hallowed thoughts remain,
And with undying faith we know
Death leads to life again

Just as we know that Winter months
When leaf and flower decay
Are prelude to the flush of Spring
And beauty's new-born day.

A Water Conservation & Development Project in the Yorkton Area

by C. J. Houston, Yorkton

In the vicinity of Yorkton there lies an area of marsh land which offers unique possibilities for multi-purpose use through such an arrangement under the Agricultural Rehabilitation and Development Act.

The area concerned is shown on the accompanying map. It consists of five lakes—upper and lower Rousay Lakes (5), York Lake (6), Leach Lake (4), Crescent Lake (3), and the adjoining marsh or “wetlands” area (1 and 2). It extends from #10 Highway, seven miles west of Yorkton, and cuts #9 Highway 14 miles south. It is one of the best remaining examples of a “wetlands area” in Saskatchewan.

The project involves further water diversion into the area, for example, from Sorefoot Creek, and establishing dams, dykes, and controls, for the dual purpose of holding water in the area, and to prevent flooding of adjacent farm land by providing drainage in the wet years. This area has considerable potential for better agricultural use. It has a wider untapped potential in other fields related to water, wild life, and recreation.

In the past decade this area has been subject to great fluctuations in water levels, and hence drastic variations in agriculture, and those other uses which change with water levels. The new proposal is to stabilize water levels and thus conserve our natural resources.

In Canada our whole attitude and sense of values is changing. From a young country profligate in its waste of resources, we have come to realize that we are running short of many of our native sources of wealth. “Conservation” and “orderly development” are the essential slogans of the future.

To every dweller on these prairies the most obvious resource requiring conservation is water. Water is said to be a nation's most essential natural resource. Lack of water restricts the development of every community. The Central Plains region of this continent is said to be fast reach-

ing the peak of its development as limited by this one resource—water.

In Saskatchewan and other Prairie Provinces much study is now being given to the better use of our main sources of supply. To the south of us governments not only seek to preserve their present resources, but spend millions of dollars to reclaim areas which once were drained for agricultural purposes. There is general agreement among conservationists that the nation is best served when many of the areas known as “marshlands” or “wetland areas” are preserved or reclaimed.

To return to the Yorkton project—Our primary object is to stabilize water levels and thus increase the resources of the area. These resources can be placed in four categories: The Water itself, Agriculture, Wild Life, and Recreation.

I propose to list a few of the benefits from development in these four directions.

First of all there is the water itself. The presence of such large bodies of surface water should improve the water tables in the soil—and indeed help guarantee the wells of an expanding Yorkton City. The holding and storage of water in the upper branches of the Assiniboia is an essential of flood control, and benefits even the Red River control at Winnipeg. To quote Dr. T. A. Patrick, one of Saskatchewan's first conservationists, “The water is needed here, not in Hudson Bay.” A stable and fairly constant supply of water is the prime essential to permit consistent use and development of the area in all its aspects.

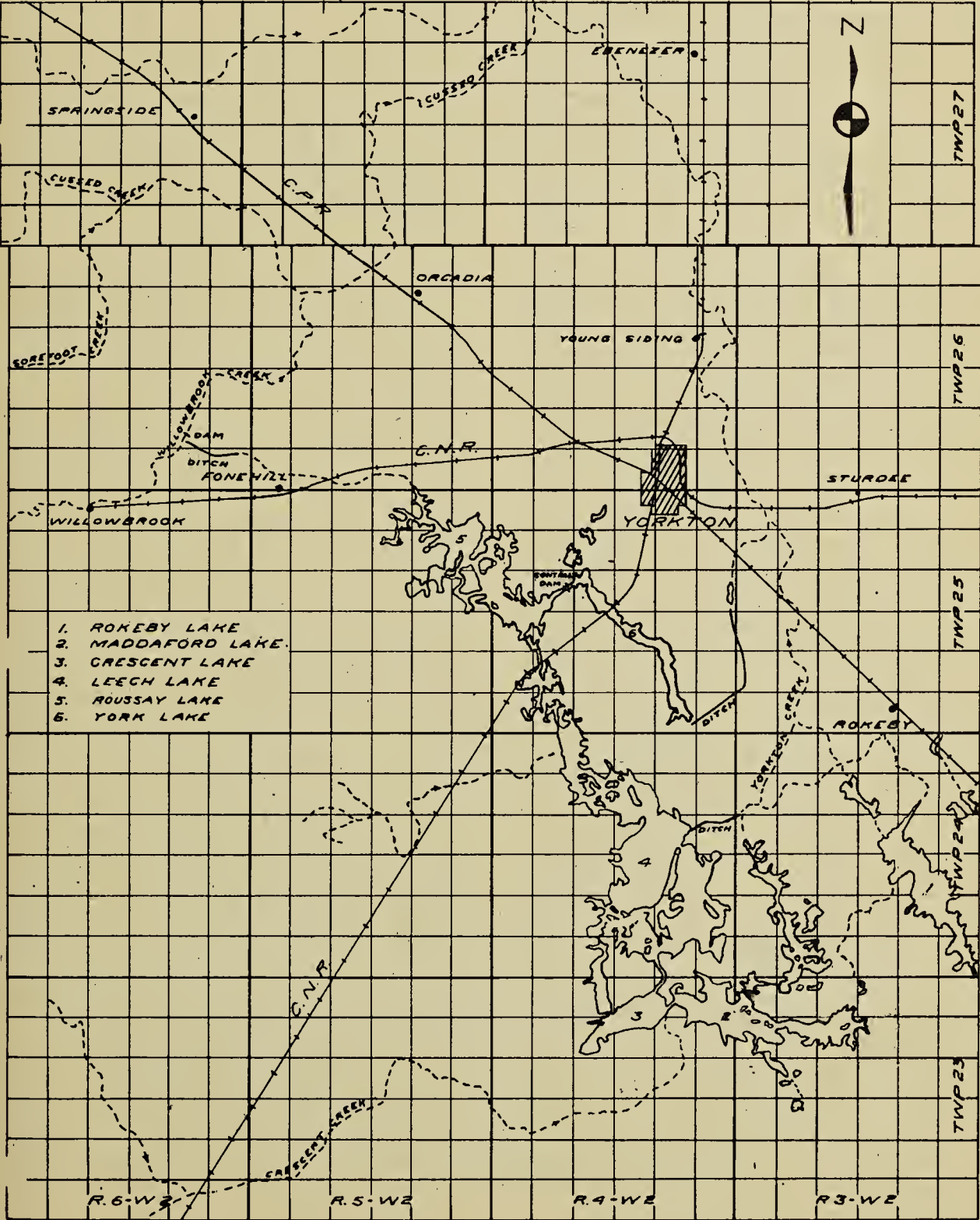
The benefits conferred on agriculture by relief from alternating cycles of flood and drought are apparent to all. Within this project area one has witnessed lake bottoms dry and cultivated, while a decade later the land for miles about is flooded. Sporadic attempts to farm marginal land have lost out to weeds and volunteer vegetation. A more stable water supply could avoid all this and permit better and more consistent

land use. Even as hay lands or community pastures the returns should be most rewarding.

The wild life potential of the area has been well demonstrated and documented. Ducks Unlimited include much of this area in what they call the "Illinois Project". Their surveys are exhaustive, and they have already spent a considerable sum on its improvement as a "duck factory". They have a continuing interest and an expressed desire to co-operate in every way possible. The area is an exceptionally fine waterfowl area, when water is present. The men with

the know-how are already on the spot.

Saskatchewan's oldest industry, the fur trade, depends on the prevalence of water. The beaver, mink, and muskrat have always been the backbone of that trade. Of recent years accurate figures are available as to the fur catch in this area of marshes. It is interesting to note that in the peak year of the 1950's the catch was 20,000 rats. For the five best years of that cycle it averaged 15,000 per year. For the next five years it averaged 8,000 skins per year. Over the ten year period this is a total of 115,000



Yorkton Water Conservation and Development Project.

Ducks Unlimited Map
Scale 1" = 6 mile

muskrats, with a total value in excess of \$230,000. This one crop offers financial justification for the entire project.

The people who received this fur money lived nearby. They are farmers, Indians and Metis. I respectfully interject that the rehabilitation of fur-producing areas is a most practical way to rehabilitate our Indian and Metis citizens.

Then comes the matter of recreational use. No other city in Saskatchewan has such recreational possibilities so close to its doorstep. Another city, Melville, is only 13 miles from the project's southern border.

In discussing the wide field of recreation let us consider that hunting and trapping have already been mentioned in the previous paragraphs. Fishing has been quite good in York Lake in the years of adequate water level; for example, one retired couple caught 360 fish during 1958 in York Lake—largest, 9 pounds.

York Lake at its best offered bathing facilities unsurpassed in the province, and enjoyed by thousands each year. This phase of the project is operated by the Kinsmen Club. Camp kitchens, a Boy Scout camp, sports grounds and playground facilities are provided. Sailing, boating and water skiing have been flourishing sports. Some 40 summer cottages are in use. In fact, the York Lake Park area has been developed into one of the finest waterside recreational areas in the West—closely adjacent to a heavy concentration of people who are already making great use of it. It is forecast that the City of Yorkton will reach a population of 23,000 by the year 2000. It is doubly important to protect this recreation potential for the use of future generations.

At this point it is interesting to look back on local history from the days of settlement in the early 1880's. In 1897 Dr. T. A. Patrick, then a member of the North West Territories Legislature, procured government help to divert waters of Willowbrook Creek into York Lake. Following the severe drought of the 1930's these lakes and marshes again faded away, and lake bottoms lay dry and parched. Campers and muskrats alike vanished from the scene. The waterfowl reached an all-time low.

At this point Ducks Unlimited became interested. A diversion of

Willowbrook Creek was created north of Fone Hill. Control dams were installed. The result was most gratifying. The next year upper and part of lower Rousay Lakes were filled, and York Lake soon followed, rising as much as ten feet in a single year. In the late forties to the fifties the water levels varied from adequate to a few years of flood levels, and this posed new problems. Today, due to consecutive years of poor spring runoff, the lakes are dangerously low again. The problem persists, but at last there is some prospect of correlating the interests involved and developing this as a multi-purpose project.

From the engineering point of view much of the project's work is already done. Ducks Unlimited have surveyed and assessed the water potential thoroughly. The City of Yorkton retained a noted engineering firm of water source consultants who have made an independent survey of possible future sources for the city water supply. The Conservation and Development Branch of the Saskatchewan Department of Agriculture has done the most intimate and extensive survey of all. At first they were concerned exclusively with agricultural benefits which might result from drainage. Of recent years they have taken the much broader view of total use and conservation. Their engineers and staff have been most helpful. It is they who have recently completed a most comprehensive survey of the possibility and the probable cost of the project. The Department of Natural Resources and Water Rights Department have also been interested and helpful.

So now we come to the spring of 1963. Is this dream of water conservation and development simply a dream or can it achieve reality? Personally I believe that realization is now possible. For the first time legislation exists at both Federal and Provincial levels which acknowledges the necessity and facilitates the development of such multi-purpose land use and conservation projects. I refer to "A.R.D.A."—The Agricultural Rehabilitation and Development Act.

The question now is this: Can the Yorkton Project qualify for help under such an Act? This new concept of multi-purpose development

in conservation of our natural resources is in its infancy, but the local committee is anxious that the project be presented to A.R.D.A. for action.

Certainly it is a multi-purpose project that would benefit agriculture, wildlife, water conservation, and recreation.

Certainly it would put much of the many natural resources of the area to better use.

It should benefit the Metis and the Indians, whose original reserve occupies part of the area.

It offers great benefits in recreational use.

It is unique in that it promises

financial returns commensurate with the costs involved.

It is unique in that the necessary engineering and assessment have already been done.

The Dominion Director of A.R.D.A. is quoted in the Leader Post of February 7, 1963, as saying that in the early stages of their work a diversity of experimental projects is desired. The Yorkton Water Conservation and Development Project would seem an ideal project for implementation under A.R.D.A. It would benefit many thousands of our Saskatchewan citizens, and preserve for those who come after us a small and already rare example of our natural heritage.

Pattern for a Refuge

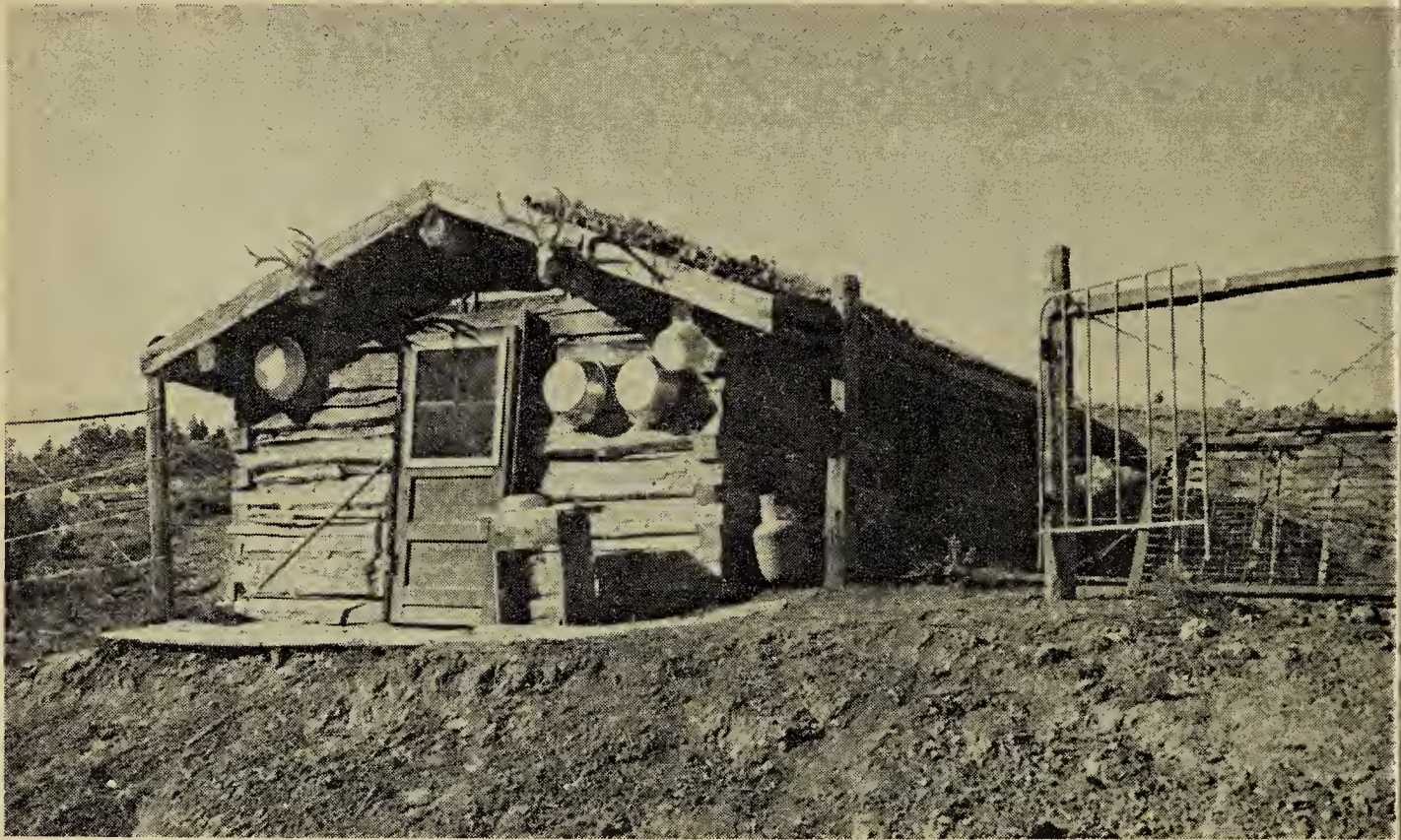
Montana's Charles M. Russell National Wildlife Range

In these days when natural areas are disappearing, much attention is being focused on parks and refuges where government action has been taken to preserve the native character of the landscape. Sometimes these protected areas are both of his-

toric interest and of value as a wildlife haven. Such is the case in the former Fort Peck Range in Montana, recently renamed the Charles M. Russell Wildlife Range in honour of Montana's noted naturalist-artist, who died in 1926.



U.S. Department of the Interior Photo.
View of rugged badlands in the Charles M. Russell National Wildlife Range in north Garfield County, Montana. Fort Peck Reservoir in background.



U.S. Department of Interior Photo.

The bunk house at Sipary Ann Game Station, which was developed from an old river ranch property. The bunk house is occupied both winter and summer.

One of the last natural stands of the great American buffalo, or bison, was in the "breaks" of Seven Mile Creek in this huge, half million acre wildlife refuge. Here the buffalo remained even after elk had disappeared from that part of Montana; only Audubon's mountain sheep outlasted the buffalo, maintaining a precarious existence in the "breaks" until 1900. Meanwhile, smaller animals and birds were brought close to destruction when the plow broke up the prairie habitat or when too many livestock moved in and took over the range. In the wooded bottomlands of the Missouri River, a few mule deer and white-tailed deer survived, and the population of these increased once more when the Fort Peck Game Range was established in 1936. Elk have been re-introduced, and the Rocky Mountain bighorn brought in to replace the original Audubon's mountain sheep. For three years the bighorn has thrived in fenced pastures and seems to be adapting itself to its new range under a cooperative program with the Montana Fish and Game Commission. Antelope still use this range, although it lacks sufficient depth to afford year-around habitat. They use the Wildlife Range as well as adjacent ranges, drifting on and off the area.

Canada Geese have been re-established along the river and on the upper reaches of the Fort Peck Reservoir. During the past five years, the peak concentration observed during migration numbered 6,500, most of which were locally raised birds. With further development, this area could make a very substantial contribution to the waterfowl population of the Central Flyway.

Mourning Doves find the "breaks" to their liking and are stopping in increasing numbers because the planting of cereal grains on the river bottoms for waterfowl has developed a plentiful food supply. This area has become the greatest breeding ground west of the Mississippi River.

The mid-grass prairie type on the benchland was the home of several birds and animals which are now precariously balanced on the edge of extinction. The Mountain Plover, Upland Plover, and Long-billed Curlew are becoming rarer. Prairie dog colonies will be permitted to remain here, along with their close associates, the Burrowing Owl and the very rare black-footed ferret. Bald Eagles and Golden Eagles frequent the "breaks" and badlands and find suitable nesting sites in these inaccessible bluffs.—Digest of release from U.S. Fish and Wildlife Service.

R. F. Oldaker

THE MAN WHO READS GULL BANDS WITH A TELESCOPE

by C. Stuart Houston, Saskatoon

Bird watching is a very interesting and rewarding hobby because one so often encounters the unusual or the unexpected. The equivalent of the golfer's "hole-in-one" or the curler's "eight-ender" may occur not once in a lifetime, but once a month or even once a week. Also, natural history is probably the last field of science where the observations of amateurs make a substantial contribution to the fund of new knowledge. Finally, one meets such interesting people with similar interests!

These points are exemplified in the most interesting story I have encountered in twenty-odd years of birding. It concerns R. F. Oldaker, of Vancouver, British Columbia, who, without banding a single bird, has made a greater contribution to bird banding than any ten banders together.

I should begin by explaining that a bird bander may expend a lot of time, money and effort to little avail. He may devote a lot of energy to a certain species and then wait in vain for recoveries to come in over the succeeding years. This was essentially the situation as regards my California Gull banding in 1959, when my recovery rate was barely 1% and the only out-of-province recoveries were one each from California and Mexico. Although there were no recoveries from intermediate points, I presumed that the gulls migrated predominantly southwards from Saskatchewan to reach these wintering grounds (perhaps pausing briefly in Salt Lake City to admire the monument erected in their honor).

Imagine my surprise, then, in September, 1959, when I received from the U.S. Fish & Wildlife Service three reports of California Gulls **observed by telescope** by R. F. Oldaker of Vancouver, B.C. Incredulous, I wrote to Mr. Oldaker. Here is his explanation:

"It does, as you suggest, require lots of patience to record these bands.

Fortunately, I have plenty of it. Not only that, I am very fond of birds, especially the gulls, and am never happier than when surrounded by thousands of them on the Vancouver City Dump, where most of my observing is done. I read my first band number—a Glaucous-winged Gull—on November 2, 1958, in Stanley Park, Vancouver, and it was this experience that gave me the idea of using up my time in an all-out search for bands.

"Needless to say, I have made many unsuccessful attempts to read the bands, and at first I felt every failure keenly. (I have a long list of incomplete band numbers.) Now, however, I do not worry very much if a bird gets away from me. The chances are good that I will find him again some day, as the gulls seem to like to stay a long time in any area where conditions suit them.

"In order for this band-reading to be successful, there are many conditions that must be fulfilled. Since several sightings at different angles must be made to obtain the complete number (the band number extends most of the way around the circular band), the bird must be, preferably,



Photo by J. G. Sarles.
R. F. Oldaker reading a band.

at rest in an area where I can move round him and read a few digits at a time. Failing this, I must wait for him to scratch his head with the banded foot, or move to make way for another bird. I have now had enough experience with these birds that I can often make them change position without taking fright and flying away. If they sit down in the middle of operations I can, by using great care, make them stand up again. I have read many band numbers without moving the scope.

"My scope is of 81 mm. clear objective aperture and I designed and built it myself with optics purchased from a firm in the U.S. For band reading I normally use it at 35x, which provides adequate light, but I can, if necessary, take it up to 45x or 55x simply by changing eyepieces. I only use the latter when unable to approach within 150 feet of the bird, as with every increase in power there is a corresponding reduction in the light that enters the eye.

"For this work it is absolutely essential that the scope be equipped with a finder. Mine is a homebuilt 7x monocular which functions in the same manner as the scope-sight on a rifle. I use this monocular to scan the birds' legs for bands, and having located one, I center it in the monocular and the band is automatically in the field of view of the main scope. I can proceed to read it instantly, thus saving valuable time.

"You will find that you can read a gull band with the naked eye at 3 or 4 feet and at 20 feet with an 8x binocular. You will readily understand that I can read a band with my 35x scope at 100 feet without any trouble, provided there is no sun glare and the wind is not high enough to vibrate the scope. At 55x I can read a gull band at 200 feet, but only when conditions are ideal.

"The Vancouver City Dump is less than half a mile from the North Arm of the Fraser River and this seems to be "headquarters" for most of the gulls. All day long there is a never-ending stream of birds going back and forth between River and Dump—it is truly a gull's paradise. Others come in daily from the Steveston Jetty, the Point Grey area, and local roosting places, and return at night.

"I have several records of adult Glaucous-winged Gulls who were trapped, banded and color-coded at their nests on Mandarte Islands, by the University of B.C., and kept under daily observations there—and who visited the Vancouver City Dump for food, returning to the island to their waiting mate the same day to feed their young. This island is approximately 45 miles from Vancouver. Others seem to commute daily from the Howe Sound breeding colonies. At the same time, thousands more are resting on the log booms in the river and on the roofs of adjacent sawmills.

"Although the Glaucous-winged and California Gulls receive most of my attention, other species should be mentioned. Ring-billed Gulls, mostly juveniles, are quite common in late summer and fall. Adult Herring Gulls of both North American races appear in September and many stay until early spring, and I have seen a third race with orange legs which appears only in the spring on northward migration. The Mew Gull, having different feeding habits, is only an occasional visitor, and juvenile Franklin's Gulls have been seen only once or twice each summer. In winter, Glaucous Gulls frequent the area and Western Gulls are occasionally seen. I have not yet recorded band numbers of any of the last four species."

A final note from Mr. Oldaker accompanied the photographs requested to illustrate this article:

"The gulls do not mind me at all though they are wary of strangers. Mr. J. G. Sarles tried to get a photograph of me surrounded by gulls but they would not let him get near enough. However, they are accustomed to having me with them and let me move freely among them. We seem to have an affinity for each other."

Mr. Oldaker has continued his painstaking observations, thus adding immensely to the value of the gull banding on the breeding grounds of the prairie provinces, the northern states and the Pacific coast. He has now reported over 1700 individual gulls of four species from 44 banding localities!

For example, of the 3028 California Gulls banded by Mr. Louis M. Moos



R. F. Oldaker, Vancouver, B.C.

Photo by J. G. Sarles

in Teton County, Montana, between 1954 and 1961, Oldaker has made 100 reports on 74 individuals sighted in Vancouver, B.C. Glaucous-winged Gulls figure extensively in Oldaker's work, over 1400 individuals having been reported!

He maintains a card index in which the "sight histories" of hundreds of gulls are recorded. One California Gull was reported in four successive years, several others in three years, and many in two years or twice in one year. He also has histories of Glaucous-winged Gulls who have spent five successive winters in their favorite feeding places. One Glaucous-winged Gull, 48-727701, was first seen on the Vancouver City Dump on April 16, 1959. On June 21, 1959, he read its band by its nest on Christie Island, Howe Sound, where it had been banded nine years earlier by Mr. William Hughes. On April 4 and May 5, 1960, it returned to the City Dump and then on June 19, 1960, he found it once more on Christie Island, nesting within a few feet of where it had nested the year before. The long distance record is held by an adult Thayer's (Herring) Gull banded at Cambridge Bay, Victoria Land, N.W.T., on August 27, 1962, and observed by Oldaker in Vancouver on October 24, 1962, after it had made a journey of at least 1600 miles.

"When time and circumstances permit, Mr. Oldaker keeps careful notes of the plumages, bill patterns, molts, etc., of many banded gulls. Since

these are virtually all birds of known age (having been banded as nestlings), he has been able to add much new information to what was previously known in this regard, and has even corrected some of the statements advanced in standard reference works, based on unbanded collected specimens.

I felt it would be of interest to tabulate the 29 Oldaker observations of my California Gulls banded in Saskatchewan. These represent 27 individuals, as two birds were observed in Vancouver on successive years. This represents nearly 1.8% of the 1519 California Gulls banded in Saskatchewan between 1955 and 1962. This figure should rise well over the 2% mark as further observations are made of these birds in the next few years.

Of the 124 Californias banded at four localities in 1956, and 73 banded at two localities in 1957, none was sighted at Vancouver. Also none of the small group of 17 banded at Last Mountain Lake in 1961 has yet been seen. The remaining eight California Gull banding expeditions to four lakes yielded a total of 29 sightings by Oldaker, as listed in the table.

Ring-billed Gulls from Saskatchewan appear to be proportionately less frequent visitors to Vancouver. Of 7964 individuals banded, only one, banded at Crane Lake, June 23, 1960, was sighted by Oldaker at Vancouver—on August 17, 1960.

Oldaker Observations of, Saskatchewan-banded California Gulls

Location of banding	No.	Date	Date sighted by R. F. Oldaker at Vancouver, B.C.				
			Same fall	2nd Year	3rd year	4th year	5th year
Redberry Lake	134	July 23/55					
	261	June 25/60	Aug. 12/60 Sept. 8/60 Oct. 19/60	Aug. 14/61	April 12/62 Aug. 9/62		Aug. 7/59
	207	June 25/61	Aug. 10/61				
	264	June 18/62	Aug. 11/62 Aug. 15/62 Aug. 17/62 Aug. 21/62 Aug. 28/62				
Crane Lake	346	June 23/60	Aug. 18/60	May 31/61 June 7/61 (to July 8/61) June 8/61 June 20/61 June 28/61 July 8/61 July 18/61 (to Aug. 5/61)			
Last Mountain Lake	31	June 23/58		June 29/59 July 16/59	July 18/60		
	20	June 26/60	Aug. 31/60 Sept. 13/60	Aug. 1/61			
"Lozinski Slough," Kindersley	42	June 24/58			May 18/60 July 18/60		
Various localities (see text)	214		No Recoveries				
	1519		12	11	5	0	1

These results are extremely interesting, even if they raise as many questions as they answer. The California Gulls reared in Saskatchewan and banded late in June, usually learn to fly during the first week of July and apparently stay in the vicinity for another week or two. Some of these birds reach Vancouver by the second week in August, after flying at least 700 miles in a westerly direction across the Rocky Mountains. Oldaker has sighted 12 of my California Gulls the first fall, the earliest arriving on August 10, 11 and 12. The shortest recorded elapsed time between banding of flightless young in Saskatchewan and their arrival in Vancouver is 46 days.

Not all of the gulls leave so quickly, however. I have records of six banded Californias still present in Saskatchewan in August. One banded at Crane Lake on June 23, 1960, wandered 200 miles north to be hit by a car on August 4, 25 miles north of

North Battleford. Redberry Lake gulls were shot at Hague on August 6, found injured in Saskatoon on August 10, and shot at Saskatoon airport on August 29 of the same year. Another Redberry Lake gull moved over to Last Mountain Lake where it was caught on a fishing hook on August 20, and yet another was injured at Lebret on August 28. A California Gull from Redberry was found dead along the South Saskatchewan River near Clarkboro on September 28 the same year, but its date of death is not known and illness or injury may have prevented its migration.

We know that gulls take several years to reach full breeding status. Oldaker's records suggest that some Saskatchewan gulls spent their second summer as one-year-olds along the Pacific Coast without returning to the prairies. He has sighted 11 birds throughout this year.

The five records for the third sum-

mer (two-year-old birds) suggest that some at least pass through Vancouver in migration, and again some may remain for the summer. As yet we have no Vancouver sightings for the fourth summer (three-year-olds) and only one, possibly early in fall migration, from the fifth year.

A small amount of additional information may be gleaned from records of three of my California Gulls that returned to the prairies in succeeding years. A California Gull, banded at Last Mountain Lake on June 23, 1958, returned in its fifth summer (as a four-year-old) to the same lake on May 21, 1962—at an age when we would expect it to return to its native lake to breed. There are also two records of California Gulls banded at Redberry Lake in June, 1960, that returned to the prairies in their third summer as two-year-olds: one was found dead at Drumheller, Alberta, on June 20, 1962, and one at Parkbeg, Sask., reported in a letter of July 22, 1962. Since neither had returned to its lake of origin, it is possible that they were non-breeding wanderers.

More distant recoveries remain comparatively few, but all are from localities along the Pacific Coast:—two from California, three from Sonora, one from Sinolca, and one from Baja California (the last five in Mexico). These numbers are rather

insignificant when compared with the Vancouver observations.

It is obvious that the careful observations and long hours expended by R. F. Oldaker have produced valuable results. He deserves wide recognition, for he has amply demonstrated the efficacy of his method. Although it is doubtful whether anyone else will read a fraction of the number of bands that he has, we can nevertheless hope that similar studies of other suitable species will result in years to come. Not only is Mr. Oldaker adding steadily to our knowledge of gull migration every year, but he has even induced some banders to mend their ways—for after the haphazard application of bands to twenty-thousand-odd birds, I am now careful to apply all bands with the numbers right-side-up!

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Gray-crowned Rosy Finch at Fort Qu'Appelle

by E. Manley Callin, Fort San

On February 2, 1963, an alert observer, Dr. Harley D. Jenner of Fort San, telephoned to report that there were two unusual birds at his feeding station and they could not be found in his bird book (Peterson's eastern guide). Armed with Peterson's western guide, I called at the Jenner home the next day and was rewarded with a close view of the first Gray-crowned Rosy Finches (*Leucosticte tephrocotis*) I had ever seen.

The two birds, both males, first appeared on February 2 and, with their unusual but beautiful combination of brown, rose and gray colors, regularly graced the Jenner's

feeding station for the next two months. If a fairly close watch was maintained, they could be seen half a dozen times a day, sometimes two birds and sometimes only one. The last bird was seen on April 3, but there was never more than one bird seen at any one time after March 15 and this of course posed unanswerable questions to whether both birds were still present, whether one had left or whether one had fallen to a predator.

It is interesting to note that these or other birds may have been in the vicinity at an earlier date. Dr. A. L. Swanton has described a bird seen at Fort San on January 21, 1963, which

I am satisfied was a Rosy Finch, and Dr. A. J. Hughes of Fort Qu'Appelle apparently saw one on his premises on two different days at approximately this time. Both observers were attracted by the light, yellowish bill which contrasted with that of the House Sparrows which were also present.

Four Regina enthusiasts, Margaret Belcher, Marjorie Ledingham, Lucy Murray and Holly Wallace, came out to Fort San on March 9 and the birds co-operated beautifully. Dr. and Mrs. Jenner were supplying a mixture of ground suet, peanut butter and sometimes cracked grain in a feeder on a window sill and the birds were tame enough that an observer on the inside could watch them from a distance of probably ten feet and sometimes less. The Regina group watched them for almost an hour as they came once or twice to feed on the window sill or as they fed on seeds in the flower garden at the base of the hill beside the house.

Dr. and Mrs. Jenner have made the following interesting observations concerning their feathered visitors:

(a) From the beginning they were fairly tame but as the weeks went by the birds became even more confiding.

(b) When feeding they were usually in competition with the House Sparrows and showed considerable aggressiveness; on only one occasion was a sparrow seen to contest the issue.

(c) During the last few weeks that they were present, the rosy colour of the birds became brighter and more easily seen.

As most of our readers will know, the normal home of the Rosy Finch is in the mountains of Western Canada

and United States and it is rarely seen in Saskatchewan. Evidence of this is indicated by the following recorded observations:

May, 1827—specimen taken near the Saskatchewan River between Saskatoon and Prince Albert (probably near Carlton).
November 26, 1921, January 20, 1922, and March 16, 1922—specimens taken at Eastend. Noted in several years.
Prior to 1924—repeated observations at Indian Head.
March 1, 1933—"many seen" at Ravenscrag (Spencer Pearse).
January, 1934—"bands" at Eastend (L. B. Potter).
February 26, 1934—specimen taken at Dollard by Charles F. Holmes.
October 23, 1940—sight record of one bird at Regina.
Early December, 1940—one seen for several days in Nipawin area.
Early winter, 1948—specimen taken at Regina.
June 3, 1953—sight record of one bird in Nipawin area.
October 20, 1962—sight record of one bird at Saskatoon.
February 2 - April 3, 1963—two males observed regularly in Fort Qu'Appelle area.

Details of the various observations may be found in **The Birds of the Saskatchewan River** (Houston and Street, 1959), **Catalogue of the birds of Saskatchewan** (Mitchell, 1924), **Birds of Regina** (Belcher, 1961), in the **Blue Jay** (21:12), in the references which those publications have quoted, and in the SMNH files.

It will be noted that there have been only six recorded observations in Saskatchewan in the last 25 years or more. This winter we have other reports from outside Saskatchewan of Rosy Finches east of their usual range. In southwestern South Dakota (Black Hills area) they appeared mid-January to mid-February, with 80 counted by L. Baylor near Hill City, South Dakota, on February 17, 1963; and near Lethbridge, Alberta, T. H. Bassett sighted one on March 30, 1963.

First Record of Wood Duck for Regina Area

by Margaret Belcher and Doug Gilroy, Regina

On November 24, 1962, Albert Swanston of the Saskatchewan Museum of Natural History, found a female Wood Duck (*Aix sponsa*) in one of his mink traps along the Boggy Creek, three-quarters of a mile from the buildings on Doug Gilroy's farm 14 miles northwest of Regina. The duck was removed from the trap and shown to Doug Gilroy, and it was

identified as a Wood Duck. This duck is considered rare in any part of the prairies, and neither Swanston nor Gilroy had seen one before, so several bird books were brought out to confirm the identification. The duck was then submitted to the Saskatchewan Museum of Natural History for preparation as a study skin.

The summer range of the Wood



Photo by Doug Gilroy.

Head of female Wood Duck, taken at Boggy Creek, November 24, 1962.

Duck includes southern Canada, but since it is a tree-nesting duck and frequents woodland lakes and ponds, its distribution in Saskatchewan is limited. Houston and Street in **The Birds of the Saskatchewan River** (Spec. Publ. No. 2, S.N.H.S., 1959) give the record of a male taken at Cumberland House, June, 1827 (Richardson) and of a nest found with one egg and forwarded to Washington in early June, 1890 (MacFarlane). Also cited is the record of a specimen in the Smithsonian Institution, an adult male collected at Pas Mountain [Red Earth; on the Carrot River, 30 miles from Cumberland] in June, 1890. H. H. Mitchell's **Catalogue of the birds of Saskatchewan** (Can. Field-Nat., 38:101-118, May, 1924) refers to Lang's report of a "pair breeding in a hollow tree at Deep Lake, 7 miles south of Indian Head, in 1888", and gives two early records of specimens taken by George Lang at the Qu'Appelle Lakes, October 18, 1899.

Records from the S.M.N.H. files include sight records for Hudson Bay Junction—seen in 1923 by H. H. Mitchell and one seen June 18, 1923, by George Revell; and one seen in June, 1939, on the Waskwei River, Pasquia Forest Reserve, which R. D. Symons and F. G. Bard felt sure was a Wood Duck, although they only glimpsed it fleetingly. The S.M.N.H. files also record a male taken at Carrot River (Sec. 4-53-6 W2) on May 9, 1944, by R. A. Hutton of Red Earth, this specimen being taken to the Pas, Manitoba, where it was destroyed by mice.

From personal correspondence with J. B. Gollop, Canadian Wildlife Service, Saskatoon, come two more recent records: F. A. Thompson, U.S. Fish and Wildlife Service, banded one Wood Duck on Big Muddy Lake between June 30 and August 14, 1953; Saskatoon observers, including J. B. Gollop, had a pair under observation on the creek at Pike Lake in 1959, from May 3-24 (first noted by Bob Folker).

The Wood Duck caught in Swanston's mink trap could have come from a breeding population in northeast Saskatchewan, but it is perhaps more likely that it was a straggler from the west or southwest. There may be a parallel to be drawn between the finding of a Wood Duck on November 24 and the appearance of two male Hooded Mergansers at the Regina Waterfowl Park on November 20 (reported by Belcher, L. H. Murray). According to **Audubon Field Notes**, 17:42, a large flock of 145 Hooded Mergansers appeared at Kenmare, North Dakota, on September 28, 1962, remained for almost two months, and then suddenly disappeared on November 19. On the following day, November 20, our two birds appeared at Regina, and on November 24 one was reported from Jamestown, North Dakota—which might represent the dispersal of the group at Kenmare. The Wood Duck at Boggy Creek could have been part of a similar dispersal movement rather than a bird following a north-south migration path.

The Wood Duck is considered an early autumn migrant, moving south in September and the early part of October (F. H. Kortright, **The ducks, geese and swans of North America**, Washington, Wildlife Management Institute, 1942). The late date of its appearance in the Regina area is probably related to the unusually open fall. In most parts of the Northern Great Plains Region the 1962 fall migration was late, with numerous species noted as staying much later than is normal. A new area record of the Wood Duck for El Paso, Texas, on November 24, 1962 (**Audubon Field Notes**) is closely related to our date, but the Martin County, Texas, arrival date of November 3, 1962, does indicate that at least part of the migration was on a more usual schedule.

Courtship Behaviour of Lesser Scaup

by **Frank Brazier**, Regina

While driving by Wascana Lake in Regina on the morning of April 23, 1963, I noticed that the large number (about 170) of Lesser Scaup which had been there the previous day had either moved out of the area or over to the Waterfowl Park and that only about 12 were left on the lake. Close against the near shore was a group of six consisting of one hen and five drakes. Some sort of courtship display was going on so I stopped to watch. Snuggled up against the hen was a drake, evidently the favoured one, but he did nothing except remain as close to her as possible; the hen kept tossing her head upwards in spasmodic jerks, opening and closing her bill meanwhile. The four rejected swains would edge in closer and whenever they got within two or three feet the hen would lower her head, stretch out her neck and drive furiously forward, opening her bill at the same time. I was too far away to hear any sounds from her, but she looked like an infuriated goose attacking and

perhaps she too was hissing. The rejected drakes would move off somewhat casually, their dignity unruffled by the hen's hysteria, when she would return to the chosen one, and continue her head tossing. She interrupted this only to chase off the others, and twice she dived, re-appearing to continue her display, at which time her drake would swim calmly to her side, and remain snuggled up very closely, now at her side, now under her chin. I watched this for ten minutes and it was still going on when I left.

In the last few days we have also noted little groups of Lesser Scaup in flight over the lake, consisting of several males and one female, and these are presumably the so-called "rape flights" with the males pursuing the excited female. Although rafts of Lesser Scaup always stay for some time in migration at the Waterfowl Park and on Wascana Lake, courtship behaviour is not often described.

Winter Feeding Habits of Bohemian Waxwings

by **Dorreene Inglis**, Estevan

Probably the best fed and the most photographed wild birds in Western Canada this past winter were Bohemian Waxwings which spent the cold months at Estevan, Saskatchewan.

In past years, flocks of waxwings have stopped for a while in Estevan during their flight south. In the grounds outside St. Joseph's Hospital near some evergreens and a big elm, is a large crab-apple tree. Until this winter of 1962-63, once the apples were finished, the waxwings were soon on their way to winter quarters elsewhere. This year Sister Doloretta, whose record-office windows are very close to these trees, decided to augment the bird food available outdoors. A bird lover, Sister had Audubon books in her personal library which suggested dried fruits. She offered raisins, which they ate. Then

she mixed raisins and bits of prunes. However, she watched with amusement as they picked out the bits of prunes and discarded them in order to get at the raisins. During her early observations of the birds feeding, she noticed that after taking a raisin, often a bird would fly immediately to a snow bank as if it needed some moisture to help it swallow the fruit. From then on, she washed the sticky raisins first in hot water to separate them, and then in cold water. Further, she discovered that they had a preference for light-colored raisins. She first dropped the raisins on to the ground outside her window, then she put them on the outside window ledge and it was not too long until the birds were eating the raisins out of her hand in the open window.

These birds stayed all winter, eat-



Bohemian Waxwings at Estevan, 1963.

Photo by W. G. Squires.

ing as much as 100 pounds of raisins in a week. Only through the generosity of bird lovers in Estevan and elsewhere was the feeding of these winged creatures made possible. At one time there were approximately 120 in the flock and they became so adventurous that they would settle on a hand or a forearm held just within the window—a remarkable sight which has been recorded on ordinary black-and-white film as well as on colored 8 mm. movie.

A yellow shoe box in which some of the raisins were kept was not long in being identified by these waxwings and its appearance at the window immediately brought swarms of them to that window. The birds were fed at fairly regular hours several times daily, and if for some reason Sister Doloretta was a bit tardy, they were not hesitant to let those around know by chattering away on the trees and also by swooping down on the window sill and pecking at the window. The feeding time varied somewhat according to the winter sunrise and sunset but it was roughly between eight and nine a.m. and four and five p.m. There were always some, however, which were not reluctant to accept food at other hours in the day and these afforded the doctors working in the hospital and some visitors the pleasure of feeding

them by hand. After the last feeding in the afternoon the birds would disappear mysteriously only to return at the appointed time in the morning.

One mild day in March, Sister Doloretta manoeuvred her wheel chair to the grounds outside the hospital and near the window at which the birds were accustomed to being fed. What a thrill it must have been to her when a goodly number of her wild friends flew down from the trees to settle in her lap and on her head!

CO-OPERATIVE MIGRATION STUDY — SPRING OF 1963

The following species are listed for observation for the spring of 1963: Whistling Swan, Canada Goose, Mallard, Pintail, Marsh Hawk, Killdeer, Common Snipe, Mourning Dove, Common Nighthawk, Chimney Swift, Ruby-throated Hummingbird, Yellow-shafted Flicker, Eastern Kingbird, Great Crested Flycatcher, Eastern Phoebe, Eastern Wood Pewee, Barn Swallow, Purple Martin, Common Crow, House Wren, Catbird, Brown Thrasher, Wood Thrush, Eastern Bluebird (male), Eastern Bluebird (fem.), Red-eyed Vireo, Black-and-white Warbler, Tennessee Warbler, Yellow Warbler, Myrtle Warbler, Blackpoll Warbler, Ovenbird, American Redstart, Bobolink, Redwinged Blackbird, Baltimore Oriole, Scarlet Tanager, Rose-breasted Grosbeak, Indigo Bunting, American Goldfinch, Slate-colored Junco, Chipping Sparrow, White-crowned Sparrow, White-throated Sparrow.

Information will include first arrival (date, number), and if possible dates and numbers of peaks, and departure. If you have information on any of these species not yet submitted, send report by June 15, 1963, to Mrs. Dorothy Wade, 1351 Jubilee Avenue, Regina.

Some Records of the Canada Goose Breeding in Southwestern Saskatchewan

by J. Robert Caldwell, Ducks Unlimited (Canada), Saskatoon

Today, like the pioneers, we still have the privilege of seeing many forms of wildlife in their native environment. One of the favourites is the Canada Goose, known to the scientific world as *Branta canadensis*. While many may not realize it, this bird nests fairly commonly on lakes and reservoirs in southwestern Saskatchewan. This article deals with its occurrence in Saskatchewan south of the South Saskatchewan River and west of Swift Current.

The large race of Canada Goose (*Branta canadensis moffiti*) found here is chiefly a bird of the open grassland. Aldrich (1946) describes its range as follows: Great Plains and Great Basin regions of the United States and Canada from eastern Washington and Oregon and north-eastern California, to Great Salt Lake, Utah, west-central Nebraska and northeastern North Dakota, north into the southern portions of the Prairie Provinces and British Columbia.

We can only speculate as to the abundance of this bird in Saskatchewan prior to the historic period. Mr. M. Hitchcock of Maple Creek, tells me (pers. corres., 1958) that in the early 1900's geese could be found along small lakes and creeks throughout the southwest. In the summer of 1905 Bent (1907) reported it as being common on all the larger lakes in southwestern Saskatchewan. On June 2, 1905, he found two nests each containing six eggs on a small island in Crane Lake. Nests with eggs at this date, he thought, indicated re-nesting since geese normally are early breeders. Chapman (1908) noted, during a boat trip on Crane Lake on June 19, 1908, that ducks and geese were the dominant species of bird life. S. A. Mann of Skull Creek says that he knows of geese nesting in his district as early as 1910 (pers. corres., 1958).

Undoubtedly the influx of settlers had an adverse effect on Canada Geese. Many of the homesteaders had little aesthetic appreciation for wildlife; game laws were non-existent and even had they been enacted, enforcement over such a large area

would have been almost impossible. A large and sometimes vociferous bird, the Canada is usually quite conspicuous in early spring when it is nesting. Consequently it was particularly vulnerable to the depredations of man. Mr. Hitchcock contends that the principal factor contributing to the decrease in geese nesting in the southwest prior to the drought of the 1930's was the advent of the grain farmer. Old timers tell me that it was common practice to take goose eggs and hatch them under a domestic hen. It is evident that people shot or molested these birds whenever the opportunity presented itself.

But in the "dirty thirties" drought replaced man as the chief enemy of the geese. By 1937 almost every lake in southern Saskatchewan was dry and the Canada Goose was nearly eliminated as a nesting bird. Only remnants of the population could be found, some along the South Saskatchewan River and a few persisting on the half-dozen lakes that still remained. Disrupted too, was the tradition of geese returning to nest on or near the lake on which they had been raised. In some instances the pattern of migration was also changed. For example, the number of geese stopping at Crane Lake each fall in the past few years has never approached the concentrations observed there prior to the 1930's.

Water levels started to improve somewhat by the 1940's; by the mid-fifties, ponds, sloughs and lakes were brimming. The water had come back and so did the geese. By 1958 broods were being raised on most of the large lakes and reservoirs. Several factors, I think, contributed to the re-population of the Canada Goose, and foremost may be the wildlife refuge system in the state of Montana. Geese from the Bowdoin National Wildlife Refuge, near Malta, Montana, most certainly have spread northward to nest near Val Marie. From here they may have fanned out north and west. Another factor which benefits this bird is the presence of many large community pas-

tures throughout the southwest, which have been designated as game preserves, where geese can nest unmolested by humans. Also, since the thirties, P.F.R.A. and Ducks Unlimited have built many water impoundments that retain water even through prolonged periods of drought. A number of these reservoirs are being used by nesting geese. I believe, too,

that people now are much more aware of the need for protection of various wildlife species, especially one as universally popular as the Canada Goose.

In 1958 Ducks Unlimited began to census goose broods (systematically) on lakes and reservoirs in the southwest. The results of this survey are given in Table 1.

Table 1 Brood Counts on Eight Lakes and Reservoirs With Yearly Totals From 48 Other Areas.

Names of Area	1958	1959	1960	1961	1962	Water Conditions in 1962
Big Stick Lake	18	15	8	3	2*	lake low
Black (Pahn's) Lake	7	7	6	8	6*	
Crane Lake	13	15	21	2	7*	lake dry by fall
Cypress Lake	(no fig.)	5	11	17	13*	
Hancock Project	7	10	5	7	6	water levels low
Hungerford Lakes	12	9	8	11	13	
Orleans Lakes	14	10	3	10	2	water levels low
Piapot (C.P.R.) Dam	4	10	12	8	6*	
Other Lakes & Reservoirs (**)	101	93	111	125	91	a number of areas dry
Totals	176 +	174 +	185 +	191 +	146 +	

* data for 1962 through courtesy Department of Natural Resources.
** projected brood counts included here.

With one or two exceptions, the lakes and reservoirs tabulated are the most productive in the district. These counts should not be construed as giving anything but minimum totals for it is difficult to locate every brood in the region. In a number of instances, we projected the brood counts to lakes where we knew geese nested and water remained, but which time did not permit us to census every year. These figures form part of the total under the general heading "Other Lakes and Reservoirs."

Data in Table 1 indicate a gradual increase in the number of broods until 1961, followed by a 24 per cent decline. This may be a reflection of the drought of the past several years that has again greatly reduced surface water over the whole area. Such being the case, we might anticipate an increase in the number of geese nesting on the more stable

lakes. Brood counts do not bear this out. Have these areas reached their carrying capacity or is the decline due to over-harvesting or to other causes? These are among the many questions that must be answered by wildlife biologists seeking ways of maintaining and increasing Canada Goose populations.

No one can predict the future. Nevertheless, a species that requires so little in order that it may continue to provide us with pleasure should be worthy of our assistance. If man has foresight, there is no valid reason why generations hence should not always be able to see the Canada Goose in its natural haunts.

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BIRDWATCHERS WANTED

Several years ago a study of birds in relation to their environment was begun in Europe. The birdwatchers note the number of birds of each species seen along a transect of 1.25 miles (or multiples thereof) through reasonably uniform vegetation: e.g., meadow, forest, lakeshore, etc. Transects are also studied in towns which are considered "gardens." As the transect is a "line," the observers do not crisscross through the landscape, but always make their observations from the road, trail or waterway which forms the line,

and as far into the field as is feasible. Observations are made every two weeks. The results of the first two years show a strong binding of certain birds to certain types of landscape. I have been asked whether it would be possible to set up a similar project here. For this study a number of birdwatchers and a co-ordinator are required. I shall be available as co-ordinator; if you, the birdwatchers, are interested in co-operating, please write the following information:

1. Name and address. 2. Number of tran-
- (Continued on Page 67)

Birds of the Taltson River Region, N.W.T.

by George W. Scotter, Canadian Wildlife Service, Edmonton
and Larry E. Erickson, Fort St. James, B.C.

While engaged in a study of the winter range of barren ground caribou (*Rangifer tarandus groenlandicus*) in the Taltson River region during 1962 the writers made field notes on the birds observed. The study area is located in the Taltson River region of the Northwest Territories and extends from 60° 50' N. to 62° N. latitude and from 109° W.

The physiography of the region has been reported by Camsell (1916). The area has undergone intense glaciation with little glacial deposition. Rocks of the region are reported to be of Precambrian age. The terrain consists of small but rather rugged hills with numerous muskegs and lakes at their bases.

Previous observations of birds in the general area include those by Harper (1931) in the Tazin Highlands to the southwest and those by Scotter (1961) in northern Saskatchewan to the southeast. Unpublished records have been mentioned previously (Scotter, 1961).

The annotated list which follows is doubtless only a partial list of the birds in the region, since other duties precluded more extensive observations. Relative abundance at each study site, along with a few notes of interest, are included. The arrangement and taxonomy is in accordance with the A.O.U. check-list (1957).

ANNOTATED LIST OF SPECIES

Common Loon *Gavia immer*

Rutledge L.—common. S. Taltson R.—common. N. Taltson R.—common. Hjalmar L.—fairly common. Whirlpool L.—common. Thekulthili L.—common.

Arctic Loon *Gavia arctica*

N. Taltson R.—scarce.

Canada Goose *Branta canadensis*

N. Taltson R.—scarce. Seven birds were seen near camp on two occasions.

Mallard *Anas platyrhynchos*

Whirlpool L.—scarce.

Bufflehead *Bucephala albeola*

Gagnon L.—fairly common, on lake. One nest was found about 8 feet above the ground in a hollow section of a black spruce tree. The tree was located within 6 feet of the lake. S. Taltson R.—rare.

Surf Scoter *Melanitta perspicillata*

Whirlpool L.—fairly common, on islands.

Common Merganser *Mergus merganser*

Gagnon L.—common, on lake. A nest with 14 eggs was found on a small island. Rutledge L.—common. S. Taltson R.—common. N. Taltson R.—common. Hjalmar L.—common.

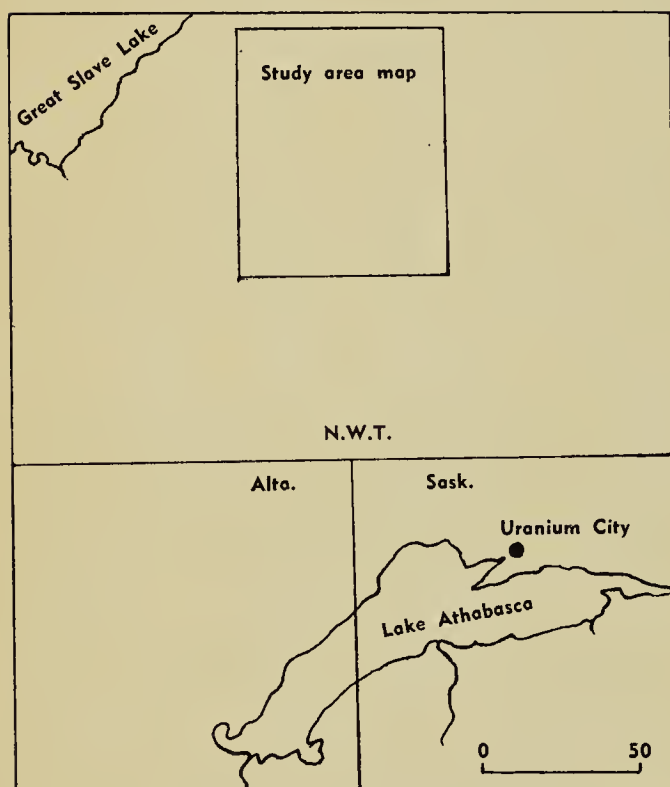


Fig. 1. Location of the Taltson River study area.

to 111° W. longitude. The study sites and observation periods were as follows: Gagnon Lake (June 22-29), Rutledge Lake (June 30-July 6), Taltson River (South) (July 7-16), Taltson River (North) (July 17-23), Hjalmar Lake (July 24-30), Whirlpool Lake (July 31-August 6), Thekulthili Lake (August 7-17). Figure 1 shows the location of the study area, and figure 2 the study sites in the area.

The forests in the region are dominated by black spruce (*Picea mariana*) and jack pine (*Pinus banksiana*). White spruce (*Picea glauca*) is common on eskers and white birch (*Betula papyrifera*) is found along drainage areas and in some recently burned-over forests. Small clusters of aspen (*Populus tremuloides*) were found along the bank of the Taltson River.

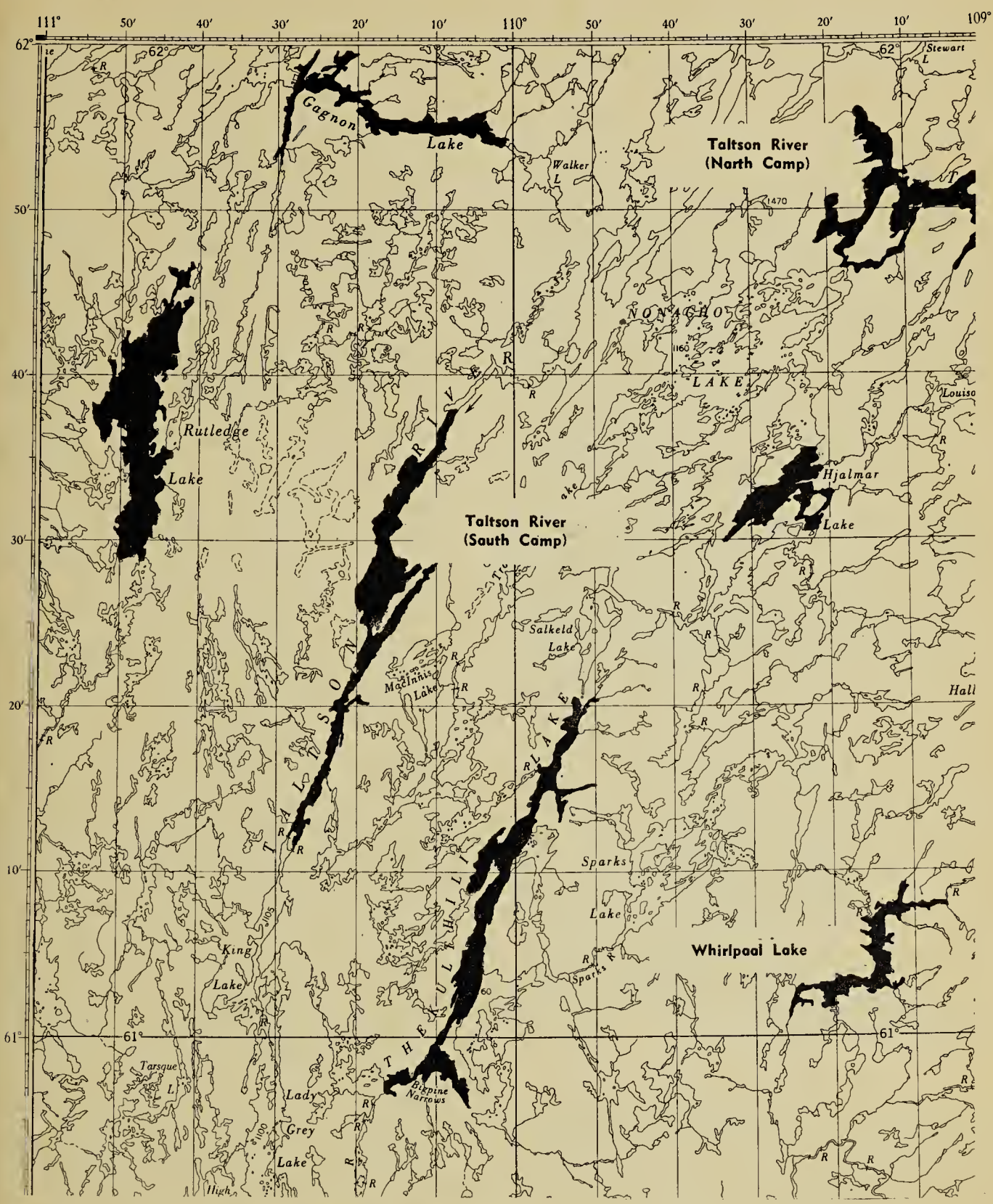


Fig. 2. The darkened areas show the location of the study sites.

Whirlpool L.—common. Thekulthili L.—common.
Goshawk *Accipiter gentilis*
S. Taltson R.—solitary.
Bald Eagle *Haliaeetus leucocephalus*
Gagnon L.—three nests, in good condition, were located, but no eagles were seen. Rutledge L.—common on the numerous islands of this lake. Only one young bird was found in the several nests that were examined. S. Taltson R.—14 eagles and several nests were seen in the area. Three eagle nests on the west side of the river, one located 100 yards from our

camp and the others approximately 2 miles north and south of the camp, were examined and found empty. Claw marks and freshly scaled bark noted on each tree trunk suggested that some mammal, possibly a wolverine (*Gulo luscus*), had disturbed the nests. There was, however, no definite proof that eggs or young had been taken. One adult bird was noted almost daily at each of the nest sites during our 10 day interval at this camp. N. Taltson R.—2 birds were seen, but no nests were located. Hjalmar L.—six mature birds were

seen, as well as one nest which was not in use. Whirlpool L.—only two birds were seen. Thekulthili L.—four eagles were observed.

Sparrow Hawk *Falco sparverius*

Thekulthili L.—fairly common, in recently burned forests.

Spruce Grouse *Canachites canadensis*

Gagnon L.—common, in mature black spruce forests. Rutledge L.—common. S. Taltson R.—common. N. Taltson R.—common. Hjalmar L.—common. Whirlpool L.—common. Thekulthili L.—abundant, in mature black spruce forests.

Semipalmated Plover *Charadrius semipalmatus*

N. Taltson R.—fairly common, on sandy beaches. Hjalmar L.—fairly



Lesser Yellowlegs

common. Two young were observed daily near our campsite. Whirlpool L.—rare.

Spotted Sandpiper *Actitis macularia*

Gagnon L.—fairly common, on sandy shorelines. Rutledge L.—rare, on sandy lake shore. S. Taltson R.—common, on sandy beaches. N. Taltson R.—common, on rocky beaches.

Greater Yellowlegs *Totanus melanoleucus*

Gagnon L.—fairly common, in muskegs. Rutledge L.—common in muskegs.

Lesser Yellowlegs *Totanus flavipes*

N. Taltson R.—scarce, near muskeg areas.

Least Sandpiper *Erolia minutilla*

Hjalmar L.—scarce, on sandy beach.

Parasitic Jaeger? *Stercorarius parasiticus*

N. Taltson R.—rare. This identification is not positive and it may have been Pomarine Jaeger (*Stercorarius pomarinus*).

Herring Gull *Larus argentatus*

Gagnon L.—common. Rutledge L.—common, with several nesting sites on island. S. Taltson R.—common. N. Taltson R.—common. Whirlpool L.—common. Thekulthili L.—common.

California Gull *Larus californicus*

S. Taltson R.—fairly common, with nests on several islands.

Bonaparte's Gull *Larus philadelphia*

N. Taltson R.—fairly common, with nests on several islands.

Arctic Tern *Sterna paradisaea*

Gagnon L.—common, on islands. One colony, on a small island, contained 14 nests. Of the 14 nests, 11 contained three eggs each, 1 contained two eggs, and 2 contained one egg each. Whirlpool L.—fairly common. Thekulthili L.—common.

Hawk Owl *Surnia ulula*

Gagnon L.—rare, in a mature jack pine forest. Only one young bird was found with the adults, although an extensive search was made by the writers and George Watson, Canadian Wildlife Service, Ottawa.

Short-eared Owl *Asio flammeus*

N. Taltson R.—solitary, near lake shore.

Common Nighthawk *Chordeiles minor*

Whirlpool L.—rare. Thekulthili L.—rare, observed near recently burned forests.

Yellow-shafted Flicker *Colaptes auratus*

N. Taltson R.—scarce, in birch forests. Whirlpool L.—rare. Thekulthili L.—rare.

Black-backed Three-toed Woodpecker *Picoides arcticus*

Gagnon L.—rare, in a recent burn. S. Taltson R.—rare, in mature forests. N. Taltson R.—rare, in mature forests.

Northern Three-toed Woodpecker *Picoides tridactylus*

Whirlpool L.—rare.

Tree Swallow *Iridoprocne bicolor*

Hjalmar L.—few, near muskegs.

Gray Jay *Perisoreus canadensis*

Gagnon L.—common, throughout area. Rutledge L.—common. S. Taltson R.—common. N. Taltson R.—

common. Hjalmar L.—common. Whirlpool L.—common. Thekulthili L.—common.

Common Raven *Corvus corax*

Gagnon L.—rare. Rutledge L.—common. S. Taltson R.—common. N. Taltson R.—common. Hjalmar L.—common. Whirlpool L.—common. Thekulthili L.—common.

Boreal Chickadee *Parus hudsonicus*

S. Taltson R.—few. Whirlpool L.—common. Thekulthili L.—common.

Robin *Turdus migratorius*

Gagnon L.—common. Rutledge L.—common. S. Taltson R.—common. N. Taltson R.—common. Hjalmar L.—common. Whirlpool L.—common. Thekulthili L.—common.

Hermit Thrush *Hylocichla guttata*

Gagnon L.—common. Rutledge L.—common. S. Taltson R.—common. N. Taltson R.—common, in birch forests. Hjalmar L.—common. Whirlpool L.—common, in birch forests. Thekulthili L.—common.

Northern Shrike *Lanius excubitor*

N. Taltson R.—rare, with fledglings.

Myrtle Warbler *Dendroica coronata*

Gagnon L.—common, throughout jack pine forests. Rutledge L.—common, in jack pine forests. S. Taltson R.—common, in jack pine forests. N. Taltson R.—common. Hjalmar L.—common. Whirlpool L.—common.

Blackpoll Warbler *Dendroica striata*

Rutledge L.—rare, in black spruce muskeg.

Red-winged Blackbird *Agelaius phoeniceus*

S. Taltson R.—rare, on a small lake near the river.

Rusty Blackbird *Euphagus carolinus*

Whirlpool L.—rare.

Pine Grosbeak *Pinicola enucleator*

Rutledge L.—rare, in mature black spruce forests.

Pine Siskin *Spinus pinus*

Whirlpool L.—rare, in black spruce forests.

Red Crossbill *Loxia curvirostra*

Gagnon L.—rare, in 40 year old jack pine forests.

Slate-colored Junco *Junco hyemalis*

Gagnon L.—common, throughout area. Rutledge L.—common. S. Taltson R.—common. N. Taltson R.—common. Hjalmar L.—common. Whirlpool L.—common. Thekulthili L.—common.

White-crowned Sparrow *Zonotrichia leucophrys*

Gagnon L.—rare, in white birch

forests. Rutledge L.—common. S. Taltson R.—common, in mature birch. Whirlpool L.—scarce. Thekulthili L.—scarce.

Fox Sparrow *Passerella iliaca*

Whirlpool L.—rare.



Hawk Owl

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(Continued from Page 63)

sects you can take (2.5 miles = 2 transects). 3. kind of vegetation along the transects. 4. Species of birds normally seen along the transects. 5. Do you have field glasses or binoculars? 6. Can you supply a good photograph of a typical part of the transects, and possibly some of the birds observed?

Results of the studies will be compiled and reported in the **Blue Jay**, with a paper intended at the end of two years.

Jan Looman,
Experimental Farm,
Swift Current, Sask.

WANTED

WANTED TO PURCHASE—
pictures showing a brood of fledged Screech Owls showing gray and rufous phases.—**Rand McNally and Company, Box 7600, Chicago 80, Illinois, U.S.A.**

New Plant Records for Manitoba

by G. A. Stevenson, Experimental Farm, Brandon

On September 26, 1962, *Abutilon theophrasti* Medic (G. Stevenson No. 2812) was collected in a garden at 855-12th Street, Brandon, where it had been introduced, it is believed, with vegetable seeds which came from Germany. There appears to be no previous record of this species for Manitoba. It has been collected in Ontario, Quebec and Prince Edward Island and according to Breitung (1957) there is a collection from Biggar in the University of Saskatchewan. It has been reported also from Nova Scotia and British Columbia. Stevens (1950) recorded it from three locations in North Dakota.

Abutilon theophrasti (Velvet Leaf or Pie Makers) is a tall, coarse, weedy, annual plant with rather inconspicuous deep yellow flowers and very large, velvety, heart-shaped leaves, and generally speaking resembles the common garden hollyhock to which it is related. The seeds are quite large and have been known to retain their viability for 50 years. Since this species is native to India and normally prefers the warmer regions of the world it is not likely to become a problem in the Prairie Provinces.

Melissa officinalis L. (G. Stevenson No. 2777) was collected on wasteland at Brandon on August 9, 1962. In Canada it has been reported only from Ontario and British Columbia but it is fairly common in the eastern and southern United States where it has escaped from cultivation. Generally speaking the plant resembles common mint, *Mentha arvensis*, but the leaves are broader and more coarsely crenate and the flowers are almost white. It has a variety of common names the most appropriate or descriptive of which is Lemon Balm, for the leaves when crushed are distinctly lemon-scented. The leaves may be steeped for a delicate aromatic drink, and the tender sprays and young leaves are used in salads and fruit caps. This savory herb—which is mentioned by the Greek and Roman poets—has been grown

in Old World gardens since ancient times.

Plantago coronopus L. (G. Stevenson No. 2828) was collected on October 3, 1962, in the clover introduction nursery where it had been introduced, presumably, with seed of *Trifolium resupinatum* which came from Portugal. This collection appears to be the first Canadian record. It has been found in the United States and according to Gray's Manual of Botany (1950) it occurs sporadically about ports but does not persist. Clapham, Tutin and Warburg (1952) gave its distribution as:—"Coasts of C. and S. Europe from S. Sweden, N. Africa, W. Asia, Azores; introduced in N. America, Australia and New Zealand." It is found in the British Isles and according to Ray (1586) it was cultivated in England 400 years ago. Vilmorn (1883) included it in his list of French vegetables. Apparently the long, narrow, coarsely pinnatifid thickish leaves—which account for one of the plant's common names, Buck's Horn Plantain—were used in salads. I have tasted the leaves on several occasions and have not found them at all palatable. One man's meat is another man's poison!

Specimens have been deposited in the Phanerogamic Herbarium, Plant Research Institute (DAO), Ottawa, and in the herbarium at the Experimental Farm, Brandon. Dr. Bernard Boivin, Plant Research Institute, Ottawa, kindly checked all specimens.

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AMERICAN MILK VETCH



Photo by the late W. C. McCalla

Astragalus americanus (Hook.) Jones

The American Milk Vetch is one of our rare milk vetches but it is a fine species. The flowers are white and the pods are somewhat inflated. It has a creeping underground rootstock and it may be found in deep woods in the Cypress Hills.

Spring Blossoms on the Open Prairie

by Keith F. Best, Swift Current

In the March issue we had reached the dry prairies in our series. There are two early spring species of the open prairie that we might consider at this time. One is a member of the Pea family, while the other is from the family of the Rose.

Early yellow loco-weed (*Oxytropis macounii*) is a low-growing, early flowering perennial herb very common on dry hillsides and open prairies to the southwest. The scientific name *Oxytropis* is latinized from the Greek word *oxus*, sharp, and *tropis*, keel, referring to the sharp beak at the tip of the lowest two united petals (keel) of the flower. This genus is separated from the closely related *Astragalus* genus chiefly on the basis of this character.



As a rule, the loco-weeds lack leafy stems; their pea-like flowers are borne in clusters (spikes and racemes) at the ends of leafless stalks. The leaves are basal, usually from the crown of a deep, woody, taproot, and are divided (pinnately compound) into paired leaflets along the midrib. The deep woody roots and frequently dense wooly hairiness enable many of the cold resistant species to grow in rather dry sites and to withstand extended drought.

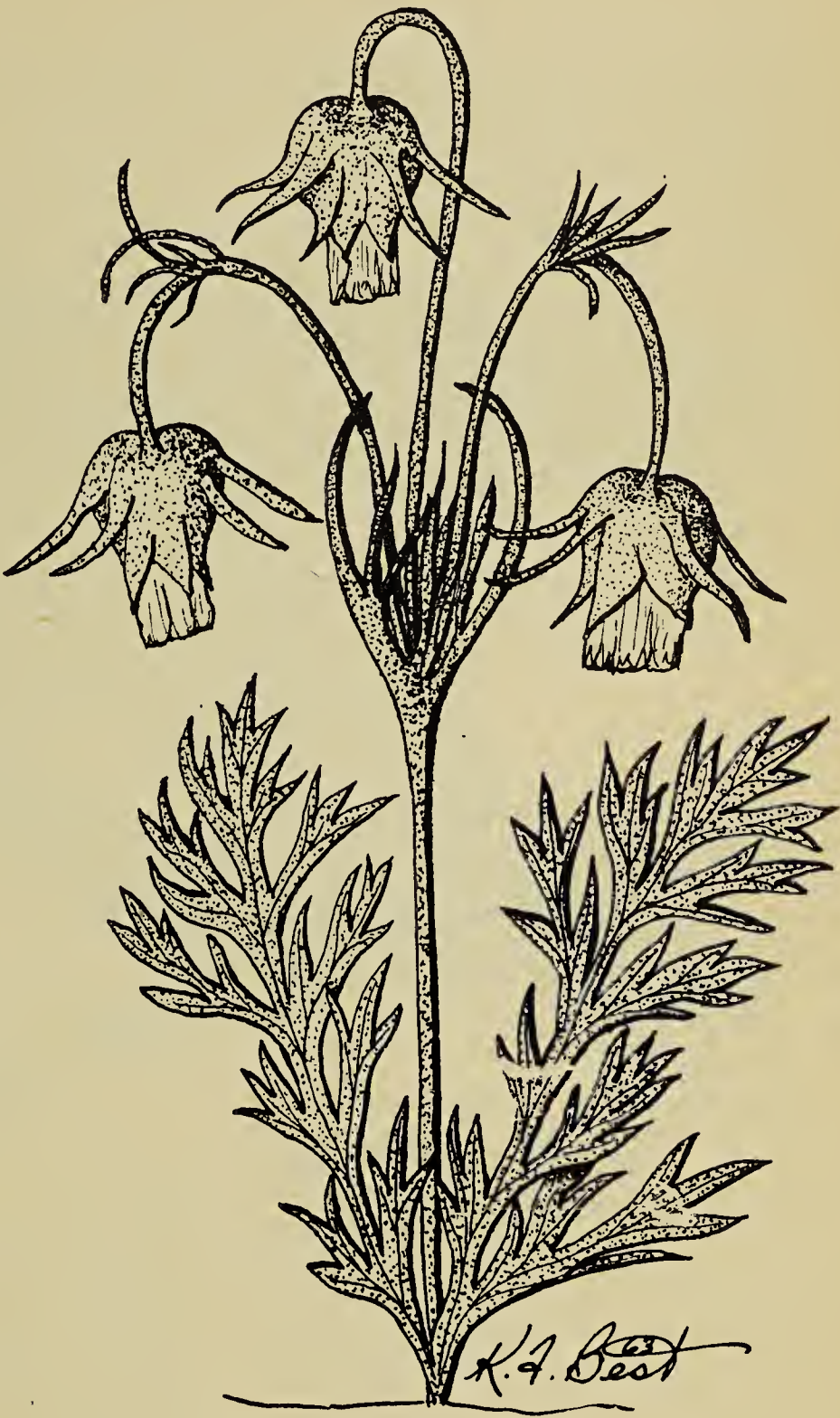
Extensive grazing of loco-weeds induce a chronic poisoning called locoism. Such plants are habit forming, their poisonous effects being cumulative, death occurring after prolonged use. Horses appear to be most seriously affected. They become hard to handle, cannot be led or backed, and can be

EARLY YELLOW LOCO-WEED

stopped and turned only with difficulty. They leap over small pebbles or try to step across a sizeable stream. Cattle shake their heads violently and tremble, and their eyes become staring. Sheep generally become weak, stumble and fall easily and may die from starvation.

Also called spike crazyweed, our early yellow loco-weed has leaves which are made up of 7 to 21 oval leaflets, from 1/2 to 1 inch long, with silky or short hairs. The yellow flowers are 5/8 to 3/4 inch long, and the pods about 3/4 inch long, often having black hairs intermixed with the short white hairs.

One of the earliest of our prairie flowers, the three-flowered aven or torch flower (*Geum triflorum*) belongs to the Rose family. The scientific name comes from the ancient Latin. Also known as the long-plumed avens, pink-plumes and Old-man's-whiskers it is an exceedingly pretty and graceful plant, with a decorative, deeply-cut leaf. A perennial herb, it grows from a thick, coarse, almost black rootstalk, with coarse black roots. The pinnately-divided leaves grow from the base of the stem. The purplish stems bear peculiar flowers, that appear from the long conspicuous sepals which flank the pink, yellowish or flesh-colored petals. The flowers do not open wide, but remain as pointed buds until the seeds appear. After blooming in May

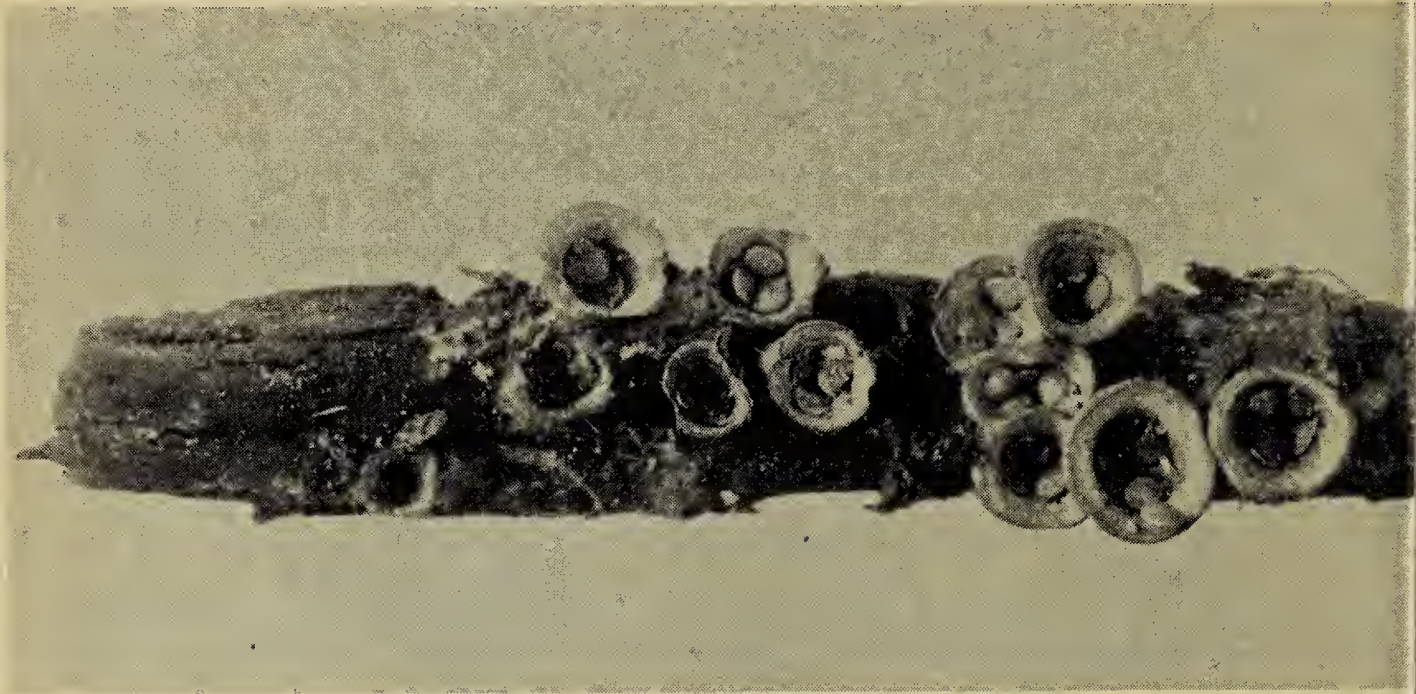


THREE-FLOWERED AVENS

or June, the flowers turn into white plumed seed heads, much like that of the western anemone and pasque flower, earning the plant the name of prairie smoke. A very common spring flower on the prairie, its bright green leaves are one of the earliest of the new foliage to appear in the spring and its flowers are among the very early spring blooms.

Bird-Nest Fungus

by A. J. Hruska, Gerald



National Museum of Canada Photo
Bird-nest Fungus showing peridiola in cups.

You will have to get down on your knees to see this small inconspicuous fungus. The Black Egg Bird-Nest Fungus *Cyathus olla* (Batsch) Pers. is one of the most astonishing creations to be found in the woods as far as its intricate method of reproduction is concerned.

The specimens in my collection are about $\frac{1}{2}$ inch high with the cups or openings about $\frac{1}{4}$ inch in width, attached to organic matter and forming close set colonies. Inside the cups are a number of black egg-like spore cases called **peridiola** fastened to the wall and bottom of these nests.

These "eggs" are smaller than

mustard seed and contain thousands of spores. For many years it has been a riddle as to how the spores got out of the hard cases containing them and further how the cases got out of the little nest-like cups. Each peridiolum is firmly attached with a strong fibrous cord to the wall of the cup.

As always in Nature, there is a reason. The cup is just right sized for a rain drop. During a rainstorm one pelting raindrop hitting the cup makes a splash and the peridiola are knocked out. As the peridiola are ejected the fibrous threads holding them follow like a comet's tail. As they land the threads wrap themselves around a twig, stem, etc., bola fashion.

With the tiny bird-nest peridiola hung up by threads on a stem, twig or leaf they become available to grazing or browsing animals. In order to grow and reproduce again the spores of this fungus must be eaten by an animal, pass through the digestive system, and be voided, before the spores will germinate and reproduce. The intricate process by which this fungus is reproduced has resulted in these small, choice treasures of Nature which are sometimes called Splash Cups.



National Museum of Canada Photo
General appearance of Bird-nest Fungus.

JUNIOR NATURALISTS

Edited by **Joyce Deutscher**, Saskatchewan Museum of Natural History



Bohemian Waxwing by Ernest Skaar.

COMMENTS AND PRIZE WINNERS

We have an interesting variety of entries for this issue ranging from some rather strong opinions about poisoning expressed by Bob Turner to some close factual observations of a flower by Bohdan Pylypec.

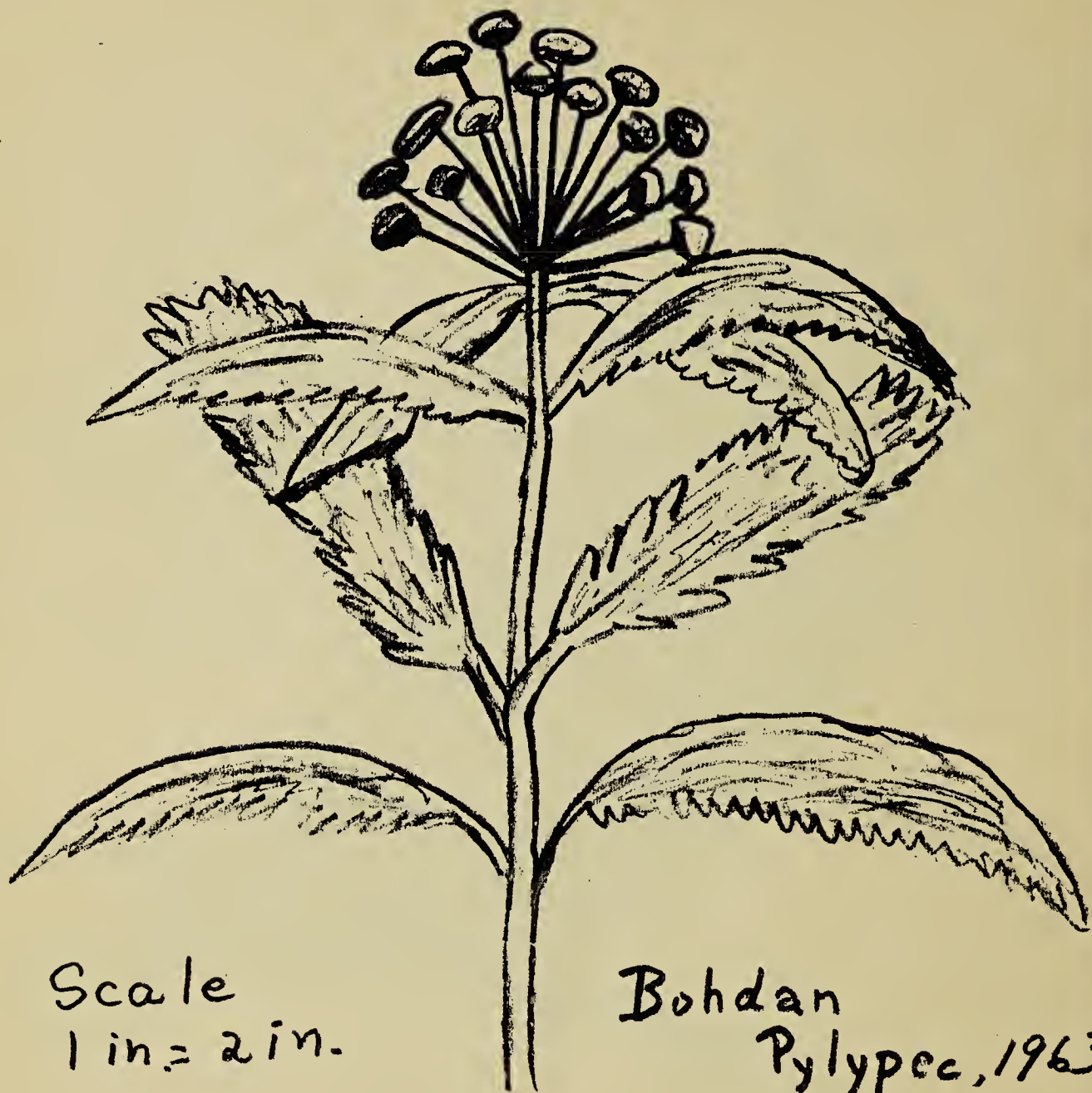
The prize, a year's subscription to the Blue Jay, is awarded to Kenneth Dickson of Tregarva for his original observations of frogs and fish in a spring at Flying Creek. We like Ken's enthusiasm and the fact that cold winter weather did not keep him from making some very interesting observations.

With the coming of summer weather, Junior Naturalists will be

getting out more and we hope making many observations of what goes on in the world of nature. Do send in your drawings, letters and comments about the plants, birds, mammals, insects and other animals, that you have been observing.

CONTEST RULES

Any boy or girl may enter. Entries must be first-hand observations and not something copied from a book or other source. All entries must be accompanied by the name, age, and address of the sender. Send entries to Mrs. Joyce Deutscher, Saskatchewan Museum of Natural History, Regina, to arrive not later than July 15.



Pizhmo, A Flower Immigrant to Canada.

PIZHMO, A FLOWER IMMIGRANT TO CANADA

Bohdan Pylypec, age 12,
Yellow Creek

The name of this plant in Ukrainian is Pihzmo. This plant grows about one foot high. It has fern-like leaves. These leaves are quite dense around the stem. The flowers are in sort of cases which are spherically shaped. These cases and the flowers look like the central part of a sunflower, but are smaller. The flowers are dark yellow. The seeds are long, dark brown and are in these cases. The roots are quite dense. This plant has a bad odour so cows and sheep don't eat it. The plant blooms for a long time.

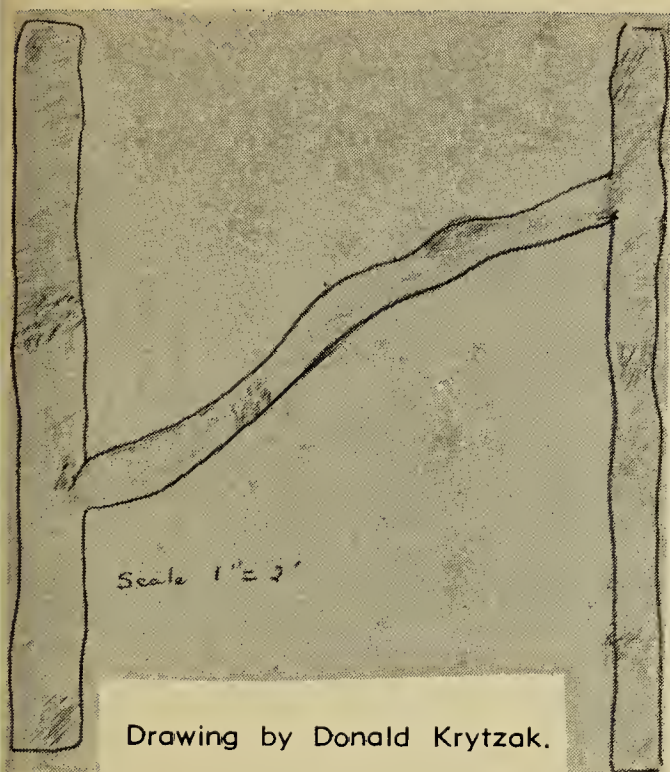
This plant originated in the

Ukraine. There it is grown to border houses. The plant was brought to Canada by Ukrainian emigrants. It was planted on what is now our property. It grew in a yard which is now deserted. It reproduced and grew by itself for awhile. Some of the plants were transplanted to our house by my father.

The plant grows in a border by our house. After producing firm roots it needs little care. It needs water only during extremely dry weather.

Some of these plants are still growing by themselves. They reproduce and grow very readily. Some of the plants spread among deserted rhubarb patches. This plant in the wild state grows in poor clay and rocky soil.

Can anyone give me the common or scientific name for this plant?



OUR FREAK

by **Donald Krytzak**, age 12,
Yellow Creek

One day our teacher, Mr. Isinger, showed us a section of two trees connected by one branch. The larger tree trunk was about thirty years old; the younger about twenty years old. We counted the annual rings. A possible solution for this freak is that the branch of the older tree rubbed up against the younger tree. As the younger tree grew the branch slowly fused. But the real problem is which way does the sap flow? From the older tree to the younger or the younger to the older? If anyone has a solution please send it in to the **Blue Jay**.

Mr. Isinger found this freak a few miles south of Yellow Creek near Basin Lake. It was found in the fall of 1962.

A MEADOWLARK VISITOR

by **Diana Hartley**, age 13,
Glasgow, Montana

The first week in September a young meadowlark flew past our window and spent a great deal of time hopping about in our backyard. My mother noticed the peculiar way it was moving and said it might be injured. It would hop from place to place and sometimes fly short distances.

We realized it was too young to survive the winter so we decided to try to catch it and nurse it back to

health so it would be freed in the spring. After several attempts in vain we were finally successful in capturing it in an old bird cage we kept in the cellar.

We covered it up for the night. The next morning we found it dead on the bottom of the cage. From this we came to these conclusions:

1. It would have been almost impossible for us to catch a wild bird if it had been healthy.
2. That it died either from some disease unfamiliar to us or from starvation.

COMMENTS ON THE POISONING OF PREDATORS

by **Bob Turner**, Box 31, Ogema

Have you ever seen an animal that was poisoned? Have you ever wondered what a poisoned animal feels like, what he goes through before he finally dies? Usually the poison takes at least $\frac{1}{2}$ - $\frac{3}{4}$ of an hour before the victim is unable to walk because of paralysis, and a little while yet before it finally dies. Poison consists of many forms, such as; poisoned meat, poison bombs, and in general, anything that the predator eats. The poisoning of coyotes and foxes is in my opinion the most cruel way of killing an animal there is.

In my opinion a well organized hunt, when the predators get too plentiful, would be the best and the most humane way of controlling them. Although this takes more time and a lot more energy on the people's part, I am sure it would be more effective. Another thing, I think that the predators should only be gotten rid of when they become a threat to the safety of our poultry, etc. Foxes and coyotes do a great deal of good, along with a little bad, so they should not be constantly controlled.

Foxes and coyotes are mentioned here in particular because they are the ones that are most often misinterpreted and end up paying for it with their lives. These two animals eat countless mice, gophers, and help to keep other predators at a minimum. But often they stray too close to the farmer's henhouse, and as a result they end up on the wanted list. Should they be constantly slaughtered because of these few and far

between instances? People are forever doing things they shouldn't and they aren't poisoned for doing it, so why should the coyotes and foxes be killed for things they don't understand? If people are so lazy that they have to poison them instead of going out and hunting them, then in my opinion they should just let them live, because in my opinion poisoning any animal is just cruel, pure inhumane murder.

WINTER ADVENTURES AT FLYING CREEK

by **Kenneth Dickson**, Tregarva

Our creek, called Flying Creek, never freezes over in spots. One day in February I decided to get down on my hands and knees and look into the hole at the spring. So I did. Well, guess what I saw. I was really surprised to see frogs lying in the dead grass, 5 to 10 of them all sleeping at the very bottom of the spring in a hole about as big as a quart jar. You can see the water coming out of the hole with lots of bugs swimming around in there too.

The next day I went to a different spring and I couldn't see the bottom for fish. Boy, was I surprised! Fish from two inches to one foot long or bigger. There were just hundreds of them. Doug Gilroy and I are going on a hike one of these days. I told him about this so he would like to see it. It is very surprising what you see in a hole in the ice in the middle of winter.

THE LYNX

by **Morley Bullock**, age 12, Maryfield

This happened on a Saturday morning. Two of my brothers went out hunting in the early hours of the morning. It was cold and quiet out and they had come upon some prey which they were trying to corner. One of my brothers was going to circle around. As he rounded a bend he came upon a startling sight. Down below him about twenty-five yards away there was an animal crouched up beside its dead prey. It looked as if it had a good meal from the young deer which was lying on its side with its neck ripped open. My brother figured it was a bobcat but later found it was a lynx.

It had decidedly long fur and very

springy, long hind legs. It had large feet and a short tail. Its tail had a black ring around the tip of it. This proved it to be a lynx. It had tufts on its ears and tufts around its cheek. Its weight was about twenty-five pounds. It was very exciting to have seen a lynx so closely. I studied it a great deal because I am interested in wild animals, and lynx are scarce in our area.

SOME SPRING NOTES

by **Brian Irving**, age 12, Kelvington

There have been many Common Redpolls, Evening and Pine Gros-Grosbeaks, Hairy and Downy Woodpeckers and Horned Larks around and near my home this spring.

On February 16 both Evening and Pine Grosbeaks, about ten of each species, were seen for the first time.

There have also been many coyotes around. I saw single coyotes on both February 26 and 27 in a field. On February 27 I saw my first Horned Larks for this year.

On March 5 a number of Common Redpolls were seen eating crumbs on our doorstep. They have been around up to this time.

On March 21 some Gray Partridges were seen in pairs. Later in the day I was down at Bob Fraser's store in Kelvington. He was feeding sunflower seeds to about twenty Evening Grosbeaks on the edge of the sidewalk. I was able to watch them for several minutes and make out their markings. Bob has fed approximately five hundred pounds of sunflower seeds this winter and spring.

On March 22 a pair of Starlings were noticed in the top of some poplar trees. I was able to view them for several minutes through 7x50 field glasses. I could make out their markings, their spots, yellow bill and short tail. These birds have been in and near our home ever since.

On March 23 I saw my first crow for this year. The first Slate-colored Juncos were seen March 26.

On March 28 a large flock of Canada Geese flew over the yard. The same day a Brewer's Blackbird was seen sitting on a spruce tree.

On April 5 four Mallards were seen sitting on the edge of a slough. A Robin was also seen sitting in a spruce tree. The Horned Larks have been around all the time.

The Blue Jay Bookshelf

THE BLUE JAY INDEX: 1942-1960.
By Joyce Deutscher. 1962. Spec. Publ.
No. 4, Sask. Nat. Hist. Society, Regina.

In September of 1942, a handful of people met in Yorkton and decided to form the Yorkton Natural History Society. One of the Society's projects was to be a news bulletin. Later that year the first **Blue Jay** appeared, edited by Mrs. I. M. Priestly. It consisted of seven mimeographed pages, with page 1 the cover. When the members of the society met in an old-fashioned "bee" to staple the pages together and, armed with blue crayons, to colour diligently the stencilled letters spelling "Blue-Jay", none envisaged the future growth of the bulletin and the contribution it would make in uniting the naturalists of the province.

The Blue Jay Index: 1942-1960, by Joyce Deutscher indicates very clearly the interests of the naturalists of Saskatchewan. All phases of natural history in the province have been examined in the pages of the **Blue Jay** during the eighteen years covered by the **Index**. As is fitting for Saskatchewan, which is so richly endowed with bird life, birds have supplied the greatest fund of information. Plant and mammal observations have also been abundant. Almost four hundred people have contributed articles to the **Blue Jay**, and many more have contributed indirectly by making their observations and records available to writers of some of the articles.

The informal format of the **Blue Jay** is probably at least partly responsible for the popularity of the journal. This same format, which makes the **Blue Jay** such pleasant reading, also makes it very difficult to obtain specific information quickly. Mrs. Deutscher has now made it remarkably easy to obtain this information without the necessity of laboriously thumbing through an eighteen year accumulation of **Blue Jays**. Anyone who has thus sought information will realize the tremendous amount of work that Mrs. Deutscher has done, and will be eternally thankful for the hours of work she will have saved him.

Not only has Mrs. Deutscher listed the names of species represented in



Isabel M. Priestly, founder of the **Blue Jay** magazine.

the **Blue Jay**, she has broken down the listings into various categories, such as: feeding, numbers, reports, etc., to make it even more convenient to locate information. Possibly a few more headings, e.g., "behaviour" under the Bird listing, would have added to the convenience. Much of the material is cross-indexed, adding further to the usefulness of the **Index**.

The **Index** has very few typographical errors, and Mrs. Deutscher has been quite consistent in her approach to the topics. There are, however, a few anomalies. Why, for instance, are all the insects listed by common names with the exception of two listed under "butterfly": *Boloria toddei* (Meadow Fritillary) and *Erebus odora* (Black Witch Moth)?

The **Index** should prove invaluable to biologists in many fields and all interested naturalists should have a copy. It is fascinating to check personal observations against those recorded by others, and the **Index** makes this far easier than was possible in the past. Many people will find perhaps that observations they have taken for granted have as yet not been recorded, and by sending the observations to the **Blue Jay** can both make a contribution to the natural history of Saskatchewan and add to the enjoyment of their fellow naturalists.—W. Harvey Beck, Vancouver.

THE RING-NECKED PHEASANT. By John Madson. 1962. Conservation Dept., Olin Mathieson Chemical Corp., East Alton, Ill. 104 pp. Illustrated.

This well written booklet is another in the series put out by the Olin Company. Those who are interested in the introduction of pheasants into their areas will find this brochure very informative. It gives a detailed history, supported by statistics, of the attempt to introduce the bird into the United States. Many will be surprised to learn that the pheasant is not native, but an exotic imported from Asia. Its genetic complexities are so garbled that it has finally emerged in North America as *Phasianus colchicus*. The booklet is well illustrated with photographs and with pen and ink sketches. It also contains a large bibliography of technical references.—A. J. Hruska.

OWLS IN THE FAMILY. By Farley Mowat. 1961. Little, Brown and Co., Boston and Toronto. Illustrated. \$3.50.

This is the fascinating story of Wol and Weeps, two highly individual owls who became members of the author's family for three years. Life was full of complications and adventure with these pets a part of the family household and every chapter is filled with exciting escapades, told with suspense and humor.

There was the time one midsummer afternoon when the new minister came to call. As he balanced his teacup in his hand, Wol suddenly flew through the open window and perched on the minister's shoulder, saying "Who-who?" "Instead of answering, the minister let out a startled yelp and sprang to his feet. The tea spilled all over the rug, and the teacup shot into the fireplace and smashed into a million pieces. It was all so sudden that Wol lost balance; his talons just naturally tightened up to steady himself. When Wol tightened his grip the minister gave a wild Indian yell, and made a dash for the door."

The setting of the story is Saskatoon, Saskatchewan, where Farley Mowat came to live when he was a lad of eight. As a boy he roamed the prairies "where you can climb a fence post and see for about a million miles—that's how flat the prairie is." He loved the outdoors and he loved animals. Wol and Weeps were not

his sole pets—he had gophers, white rats, garter snakes, and Mutt, the hero of a previous book, **The Dog Who Wouldn't Be.**

Owls in the Family is his second book written for young people. His first, a breath-taking tale of adventure, **Lost in the Barrens**, received the Governor General's Award for Juvenile Literature in 1956. Although the books are very different, in each we see the author's love and knowledge of nature, his sense of humor, his love for animals and his ability to tell a good story.

I was disappointed that the author didn't take the opportunity in his "Note from the Author" at the end of the book to explain to his readers that it is now illegal in many places, to have owls or birds of prey as pets. (The Moose Jaw Natural History Society asked the librarian to paste the page from the September 1962 "Blue Jay" on the last leaf of the two copies in our library. This page shows the picture of a young Great Horned Owl, below which it states that in Saskatchewan it is illegal to detain any bird of prey as a pet).

"The essence of a good book is communication." The reader of **Owls in the Family** feels that he is participating in all the exciting adventures that Farley Mowat so graphically describes. It is a book that all young readers (eight to eighty, shall we say) will enjoy, with a special appeal to us in Saskatchewan because it took place here. —Rosalind R. Taylor, Moose Jaw.

BIRDS OF THE LAKE ATHABASCA REGION, SASK.

by R. W. Nero, University of Saskatchewan, Regina Campus.

The fifth special publication of the Saskatchewan Natural History Society will be printed and available for circulation in June. The pre-publication price is \$2.00 and orders should be sent at once to **The Blue Jay**, Box 1121, Regina.

Dr. Nero has spent parts of three summers in this interesting northern region and this book offers his field parties' records, plus previous published and unpublished lists.

First Meeting of the Saskatchewan Archaeological Society

Many of those people who are interested in the pre-history of the northern plains met on April 20, 1963 at the Saskatchewan Museum of Natural History to attend the first general meeting of the Saskatchewan Archaeological Society.

A total of 101 persons, including five from Manitoba and five from Montana, registered. At the meeting 85 members joined the society, bringing the membership of this budding organization up to 224. At the present rate of application for membership, the figure of 300 will soon be passed.

It seemed to be the unanimous opinion of attending members that this meeting was a tremendous success. In the variety of lectures and films there were subjects which would appeal to a great diversity of interests. At the business meeting a constitution was adopted and officers elected.

The executive for the calendar year 1963 will be:

President—J. V. Hodges, Regina.

Vice-President — H. K. Cronk, Saskatoon.

Sec.-Treas.—G. Watson, Pense.

1st Executive Member — Thomas Smith, Saskatoon.

2nd Executive Member — R. Wallace, Prince Albert.

A motion was passed that an annual meeting be held in April of each year. Saskatoon seemed to be the choice for the next meeting place.

The program included speeches, films and presentation of papers supplemented by colour slides. The topics are listed below:

Opening Address by Interim President, Eldon Johnson (Kindersley).

"The Amateur Archaeologist and the Archaeological Society" — Guest Speaker, Stuart W. Conner (Sec. of Montana Archaeological Society and President of the Billings Archaeological Society).

"Government's role in Archaeology" — R. G. Young (Dept. of Natural Resources).

"Paleo-Indian in Saskatchewan" — Thomas F. Kehoe (Provincial Archaeologist).

"Glaciation of Saskatchewan" — Earl Christiansen (Glacial Geologist, Saskatchewan Research Council).

"The Alberta Point in time and space"—Thomas Phenix (Saskatoon).

"The Borden System and how to catalogue artifacts"—Gilbert Watson (Pense).

"Ceramic materials, care and restoration"—John Hodges (Regina).

"Ceramic materials, their importance and meaning" — Alice Kehoe (Regina).

"The Saskatoon Princess Burial"—H. Kenneth Cronk (Saskatoon).

"Metal materials from archaeological sites"—Thomas Smith (Saskatoon).

"Early post glacial environments in Saskatchewan as revealed at the Scrimbit locality"—Bruce A. McCorquodale (Saskatchewan Museum).

Other events included a welcoming party for early arrivals on Friday evening and a short field trip on Sunday morning.

All persons who are interested in archaeology but who have not joined this Society are urged to do so and to lend their support to this group which promises, if the present trend continues, to be one of the most successful archaeological societies on the continent. Please write to Mr. Gilbert Watson, Pense for application forms. Dues are \$1.00 per year, which entitles a member to receive the newsletter issued from two to four times a year.

The objectives of the society are defined by the constitution in this way:

"The objectives of the Society shall be to afford a convenient and beneficial association of persons interested in archaeology, to promote the preservation of the archaeological heritage of Saskatchewan through conservation of sites, objects and data, to promote use of archaeological method, to provide dissemination of information and to encourage education in the field of archaeology."

Ken Martin, President of Ducks Unlimited (Canada)



At the annual meeting of Ducks Unlimited held in Pasadena, California, this past April, Dr. W. K. (Ken) Martin, Regina dentist, became president of the Canadian branch for 1963-64. Dr. Martin was born in Regina, and educated at Luther College, Regina, and at the University of Toronto. He served as director of Ducks Unlimited for four years, and we are sure that as president he will make a worthwhile contribution to conservation in Canada.

Dr. Martin's interest in Ducks Unlimited is natural since his father, former Chief Justice W. M. Martin, was a director for many years and president in 1955-56. He is now an honorary director. Readers will remember that Ducks Unlimited recently erected a cairn at Martin Lake, four miles west of Simpson, dedicated to this "outstanding sportsman and conservationist."

A private non-profit organization, Ducks Unlimited celebrates its twenty-fifth anniversary during 1963 and its purpose remains unchanged: to preserve and develop nesting and breeding grounds for waterfowl. During the drought years emphasis was placed on engineering projects to conserve water; and money, raised by donations in U.S.A., was spent in western Canada (where 75% of

North American waterfowl breed) on dams, fences, canals, fire lanes, etc. Since 1938, 620 projects (241 in Saskatchewan) have been built at a cost of \$8.3 million. Last year a dam on the Saskeram River in the Saskatchewan River Delta was removed and replaced by an eight-bay concrete control structure on which more work will be done this year. When completed it will stabilize water levels on 35,400 acres with 254 miles of shoreline. Other delta projects in the same area planned for 1963 are:

1. Rae Lake, 1500 acres, 17 miles shoreline.
2. Murphy Lake, 2880 acres, 46 miles shoreline.
3. Elm Lake, 1255 acres, 9 miles shoreline.
4. Barrier Creek, 4467 acres, 30 miles shoreline.
5. Reclamation of 570 acres with 15 miles shoreline on Hecla Island, Lake Winnipeg.

About \$165,000 will be spent on construction in Manitoba, \$105,000 in Saskatchewan, \$140,000 in Alberta, and the balance of the \$600,000 budget on biological surveys and research. Land for major projects in Manitoba and Saskatchewan was made available by the governments on 21-year leases, rent free. Smaller projects have been made possible through farmers and owners giving long-term easements.

Other activities of the association included bird banding, duck counts, planting programmes to increase water plant growth, seeding of dry land grasses on dams and canals. Emphasis has been placed during recent years on public relations programmes encouraging the preservation of wetlands; D.U. hopes to discourage the removal by drainage, etc. of marshes and other wildfowl habitat, on submarginal agricultural lands and to promote resource programmes beneficial to the land owner.

We would like to congratulate Dr. Martin on his election as president of Ducks Unlimited; we wish him and the directors a successful year in their important branch of conservation.

NOTES AND LETTERS

IN DEFENCE OF THE SANDHILLS

The following is an excerpt from Liz Roley's "Nature Notes" column in the April 26, 1963 *Leader-Post*, that began with a description of a trip to watch the migrant waterfowl at "Buck Lake" southeast of Regina. The watchers were particularly interested in the flights of Sandhill Cranes.

"While some sandhills travelled very high, other flocks circled and searched. Were they expecting the three cranes on the stubble to encourage them to land? Could they have read a *Leader-Post* story caption recently: 'Last days of freedom waning for Sandhill Cranes' they would have realized they had reason to become wary of our land.

"Are we to become responsible for making them become another of the vanished hosts of the past? No one wants to see farmers suffer because cranes show a remarkable attachment to the north end of Last Mountain Lake. Yet this was the area declared a wildlife sanctuary, the first such sanctuary in North America.

"In this enlightened age is it too much to expect wildlife services to solve such problems? To protect the farmer as well as the birds?

"Saskatchewan is the only province where cranes are seen in anything like their former numbers.

"The family of these long-legged waders consists of only two chicks, so could diminish fast. Both parents take care of the young. They are an ideal pair, probably mating for life.

"The first time the American Ornithologists' Union ever met in Canada west of Toronto, the field trip to view the magnificent sight of 10,000 sandhills was one of the highlights of the meeting. Visiting Indian and Philippine delegates declared the most important thing they learned at the meeting was that as a natural resource wildlife should be conserved and protected.

"Will the sandhills remain a sight to tune the hearts of our children

to springtime? Or will they become a bit of forgotten natural history as it is feared their relative the Whooping Crane is destined to become?"

BIRD WATERING STATION

The photograph shows a bird watering station which we constructed of a one-way shaft and discs. This watering station has been in use for four years now. It is kept well supplied with a pail of water morning and night. Numerous birds frequent it—permanent residents as well as migrants and summer residents. Our family has been rewarded with sightings of bluebirds, orioles, yellow warblers, hummingbirds, and even a pileated woodpecker during the drought of 1961.

We also have a feeding station made of Japanese orange boxes this winter [letter of March 13, 1963] and were delighted with a visit from a flock of 20-25 Evening Grosbeaks on March 9. A pair of magpies that have stayed on the farm all winter have been persistent thieves of the suet hung out for chickadees. Actually we have not had much luck attracting birds to the feeding station this winter as there seems to be a shortage of them in the district.—**Janice Ferch, Grenfell.**



Bird watering station.

UNUSUALLY LARGE FLOCK OF BANK SWALLOWS

I wish to report what to me seemed an unusually large flock of Bank Swallows sighted one evening during July, 1962, about six miles west of Pleasantdale, Saskatchewan. My wife and I were driving east to Pleasantdale when we were obliged to stop to avoid driving over these birds, most of them evidently young, resting on the road, the fences, and the adjacent fields. The location of the sightings was south of sec. 3-42-19 W2.

I endeavoured to estimate their number by the area they covered and the average distance between them. Each bird seemed to occupy an average of one square foot, with a total area of upwards of two acres covered. Since there are 43,560 sq. ft. per acre, the total number of birds may have reached six digits! My figures seem astounding, but my experience in surveying and farming suggested my method of calculating the numbers.

I believe the nesting place of this flock can be found within a radius of three or four miles where large gravel deposits have been opened up in connection with the recent paving operations on Highway No. 6 — **Thomas R. Smith**, Saskatoon.

XMAS COUNT AT WETASKIWIN, ALBERTA

I am enclosing a list of birds seen in my Christmas census; the count was made of the farm where I live 14 miles west of Wetaskiwin, but I did not get the list sent to the **Blue Jay** in time for inclusion in the summary of counts. Birds seen while walking a half-mile back on the farm and around the feeder at the house—Ruffed Grouse (1), Downy Woodpecker (1), Black-billed Magpie (2), Black-capped Chickadee (6), Red-breasted Nuthatch (1), Bohemian Waxwing (6), House Sparrow (200), Evening Grosbeak (8). Number of species—8; total number of birds—225. Other birds seen between December 25, 1962, and January 1, 1963—Golden (?) Eagle (1), Great Horned Owl (1), Blue Jay (1), Northern Shrike (1), Pine Grosbeak (2), White-winged Crossbill (30).

The most unusual record was the Red-breasted Nuthatch. It was first

seen the third week of November and has been coming to our feeding station pretty well every day since [letter of February 6, 1963]. I have never seen a nuthatch after October, before.—**Fred H. Pegg**, Wetaskiwin, Alberta.

A PICKER-UPPER

Somebody sent me the **Blue Jay** for a Christmas present. I used to take it but gave it up because it was just for the birds, and I don't bird watch. My wife does—she watches that the hens don't get into the garden!

I enjoyed the article by Watson Crossley on rocks. Now about COLLECTOR, in answer to a letter from H. K. Cronk. When a fellow sees a nice arrow head on the ground, why shouldn't he pick it up. Isn't this better than leaving it to be broken?

Half the book about birds, or even three parts, is all right with me—but give us more about Indian tools and stones. Print articles about spear points and axes and say how big they are in inches, not in centimetres! "Picker-upper", **Fred Toilly**, Swan River, Manitoba.

PRAIRIE DOGS

The Saskatchewan Government has been in the forefront concerning legislation for the common good. Perhaps Saskatchewan could also give leadership in preserving what is left of our wildlife. I think the Government should be urged to set aside our prairie dog country. Do you think a drive should be put on by private individuals or by the Society to gather funds to buy land in that area?

I am at present in Vancouver, but to me the prairie is home, even the bald prairie. I would like to get to the "meet" in the Cypress Hills this summer, and it would be especially interesting if a trip to see the prairie dogs could be made at the same time. —**Dora Bardal**, Vancouver.

MORE INFORMATION WANTED

On Cougars in Saskatchewan

Since the publication of my article on cougars in Saskatchewan, many interesting reports have come from different parts of the province, and I wish to thank all those who have written to me. I hope to continue to receive reports of all sightings,

and I am urging that all such reports be as detailed and specific as possible. Please give location, date, names of all observers, and distance at which seen, and as many particulars as you can about your observation of the animal—colour, size of head, body, tail, manner of walking or running. If you have the evidence of a kill, describe the animal killed, the indications of how it was killed, whether it was moved or covered with brush, or portions removed, etc. The cougar kills by leaping on the back of its prey and biting into the back of the neck, so any kill by a bite on the back of the neck should be investigated and tracks sought. If there are tracks, measure size and distance between foot prints, and if possible make a plaster mold.

I should appreciate having any further information sent to me at my address.—**Tom White**, Suite 3, 1919 Scarth St., Regina, Sask.

COYOTE



This photo of a female coyote was actually taken of an animal in captivity at the Forestry Station in Saskatoon. **Terry Wedge** took the photo by pushing the camera lens through the mesh of the cage and waiting until the coyote was in a position in which the cage background could be eliminated by cropping.

GUIDE NEEDED

I would like to see the Society publish a guide to the reptiles and amphibians of Saskatchewan, similar to **Harvey Beck's** pamphlet on mammals. Perhaps it could be a 20-page pamphlet included as an insert or fold-in in the **Blue Jay**. This would insure its distribution to most of the mem-

bers at reasonable cost. The presence of good photographs in such a guide is perhaps more necessary than in the mammal guide. It would also be useful to indicate hypothetical limits in the range map and text, as well as using symbols to indicate record localities.—**Terry Wedge** Saskatoon.

A HOME FOR WRENS

An easily and quickly made nest holder for wrens which they really like can be made from a tomato or other smaller tin. Wrap it with some dull-coloured material such as old overall, sewing the cloth firmly with good string, and letting it cover the lower side of the open end of the tin to leave a small opening for the bird to enter. A nail hole near the edge of the lower side of the tin allows any rain that might drive in to drain away. Hang the tin on its side against a building, out of reach of cats, be sure the tin is held firmly, and put a few twigs or grass in it to encourage the house-building wren.—**Mrs. S. B. King**, Lacombe, Alberta.

PESTICIDES

About the most compelling, and yet little understood problem of the present day is the universal pollution and poisoning of the atmosphere, water supplies and soil, and through these of our food and drink.

Agricultural chemicals are more and more under suspicion by responsible, informed, **unsubsidized** researchers and scientists, with serious attention being given the matter, at last, by a number of our agricultural newspapers and magazines.

Insecticides, weed sprays, fungicides and the like, the most potent poisons yet known, are used indiscriminately by millions of people who have little or no knowledge of the effect of the materials they are using, and the multi-million dollar corporations producing these have little care for anything but profits. Yet more and more responsible researchers are pointing the finger at these chemicals with their probable "combined effects", as being the principal cause of little known or unknown diseases and ailments.

No space here to go into the broad question properly, but sufficient to

say that lindane, dieldrin, aldrin, toxaphene, to mention the worst to date, are so incredibly toxic that materials containing even a low percentage of them are a serious danger even to those working with them. Yet they are sold indiscriminately to anybody who wants them. — E. Symons, Rocanville.

NEW NORTHERN AIR TRAVEL REGULATIONS

The Canadian Civil Aeronautical Board (C.C.A.B.) has announced that in view of the increased number of forced landings in Canada's north woods, with attendant long cold nights and endless days of scanning the sky for rescuers, a new set of regulations governing emergency equipment will be posted shortly in post offices across the nation. Of particular interest to naturalists is regulation No. 9Ac requiring a copy

of Special Publication No. 5—Saskatchewan Natural History Society, entitled **Birds of the Lake Athabasca Region, Saskatchewan**, by R. W. Nero. It is believed that this publication will materially assist in aiding the hungry and lonely in identifying (and providing with some background information) at least some of the birds which will probably remain just out of reach. [Ed. Note: Pre-publication price of Dr. R. W. Nero's publication **Birds of the Lake Athabasca Region, Saskatchewan**, which is expected to appear in June, will be \$2.00. Send orders to **Blue Jay Box 1121** for this new publication, No. 5, and for previous publications: No. 1, **A Guide to Saskatchewan Mammals** (W. H. Beck), \$.50; No. 2, **The Birds of the Saskatchewan River** (C. S. Houston and M. G. Street), \$1.50; No. 3, **Birds of Regina** (M. Belcher), \$1.00; No. 4, **The Blue Jay Index** (J. Deutscher), \$2.00.]

S.N.H.S. Summer Meeting Programme

Cypress Hills Provincial Park, June 14-16

Friday, June 14 (all times M.S.T.)

7:00 p.m. Registration at Park Headquarters.

8:00 p.m. Business meeting and social get-together. Hall at Park Headquarters.

Saturday, June 15

7:00 a.m.—8:00 a.m. Early morning birding.

8:00 a.m.—9:00 a.m. Breakfast at Park restaurant.

9:00 a.m.—5:00 p.m. All-day field trip by car. Noon stop at Fort Walsh for picnic lunch (lunches packed at the restaurant can be picked up at breakfast. Bring your own thermoses.) Further expedition into the Trumpeter Swan nesting area, weather and roads permitting. Tour guide: Steve Mann..

6:00 p.m.—7:00 p.m. Supper at the Park restaurant.

8:00 p.m.—10:00 p.m. Programme of slides and film in one of the church halls.

Sunday, June 16

9:00 a.m. Optional morning expedition, details to be arranged.

THE SASKATCHEWAN NATURAL HISTORY SOCIETY

OFFICERS (October, 1962, to October, 1963)

Honorary President	President J. W. T. Spinks, University of Saskatchewan, Saskatoon.
Past President	Ronald M. Bremner, 404 Medical Arts, Saskatoon.
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First Vice-President	Doug Wade, 1351 Jubilee Avenue, Regina.
Second Vice-President	A. O. Aschim, Prince Albert.
Treasurer	Frank Brazier, 2657 Cameron Street, Regina.
Circulation Manager	Frank Roy, 120 Maple Street, Saskatoon.
Editor	George F. Ledingham, 2335 Athol St., Regina.
Corresponding Secretary	Margaret Belcher, University of Saskatchewan, Regina Campus.
Recording Secretary	Thelma Pepper, 1015 Temperance St., Saskatoon.

DIRECTORS

Three-year directors: Dave Santy, Beechy; Robert Mills, Saskatoon; Jack Lane, Brandon; Robert Folker, Saskatoon; David Chandler, Masefield.
Two-year directors: Lawrence Beckie, Bladworth; Manley Callin, Fort San; Doug Gilroy, R.R. 2, Regina; John Hudson, Saskatoon; Ross Lein, Estevan.
One-year directors: Harvey Beck, Vancouver; Mrs. Keith Paton, Oxbow; Bill Richards, Saskatoon; Spencer Sealy, Battleford; Mrs. F. B. Taylor, Moose Jaw.

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Ron Lloyd, Meath Park; John Nelson, Moose Jaw; A. O. Aschim, Prince Albert; Tom Gentles, Regina; Frank Roy, Saskatoon.

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Bookshop: Mrs. Elizabeth Cruickshank, 2329 Athol St., Regina; Conservation: R. D. Symons, P.O. Box 1121, Regina; Greeting Cards: Mrs. Dorothy Wade, 1351 Jubilee Ave., Regina; Membership: Frank Brazier, 2657 Cameron St., Regina; Newsletter: Doug Wade, 1351 Jubilee Ave., Regina; Prairie Nest Records Scheme: Elmer Fox, 3455 Rae St., Regina; Publications: R. W. Nero; Research Awards: Elmer Fox.

NOTICE TO MEMBERS

Members will be interested in the Treasurer's recent report on membership, giving total membership as of April 30, 1963.

Locality	Renewals	New	Total
Sask.	820	253	1073
Alta.	126	84	210
Man.	120	40	160
S.C.	46	15	61
Other Can.	57	14	71
U.S.A.	63	13	76
Other countries	8	5	13
Schools	522	17	539
Complimentary			
+ exchange	34		34
	1796	441	2237

MEMBERSHIPS

All persons interested in any aspect of nature are invited to join the Saskatchewan Natural History Society. Membership dues per calendar year are: Regular, \$2.00; Junior (including schools), \$1.00. The **Blue Jay** is sent without charge to all members not in arrears for dues. Send your membership to Frank Brazier, Treasurer, **Blue Jay**, Box 1121, Regina.

REPRINTS

Inquiries about quantities of reprints of any article printed in the **Blue Jay** should be sent to Midwest Litho, Saskatoon, Sask. Contributors wishing a few extra copies of any **Blue Jay** may get them at cost. Requests should be made to the Editor when material is submitted for publication.

Can you help increase these totals?

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Sask. Photo Services

Park buildings, Cypress Hills Provincial Park, headquarters for the S.N.H.S. summer meet, June 14-16

SEND ALL SUBSCRIPTIONS, RENEWALS AND ACCOUNTS TO

Frank Brazier, Box 1121, Regina, Sask.

**SEND MATERIAL FOR PUBLICATION IN THE SEPTEMBER ISSUE
BY JULY 15, 1963, TO**

G. F. Ledingham, 2335 Athol Street, Regina

